

R E P O R T R E S U M E S

ED 012 138

EC 000 446

OHIO'S PROGRAM FOR HEARING HANDICAPPED CHILDREN.

BY- HARTWIG, J. WILLIAM JONES, CHRISTINA C.

OHIO STATE DEPT. OF EDUCATION, COLUMBUS

PUB DATE 66

EDRS PRICE MF-\$0.18 HC-\$4.44 111P.

DESCRIPTORS- *HARD OF HEARING, *DEAF, *PROGRAM DESCRIPTIONS, *AURALLY HANDICAPPED, *DEAF EDUCATION, AUDITORY TESTS, HEARING AIDS, CHILDREN, PROGRAM ADMINISTRATION, TEACHER CERTIFICATION, PARENT EDUCATION, RECORDS (FORMS), ADMINISTRATIVE ORGANIZATION, STATE STANDARDS, PSYCHOLOGICAL EVALUATION, STATE PROGRAMS, ADMISSION CRITERIA, MULTIPLY HANDICAPPED, AUDITORY EVALUATION, COLUMBUS

SPECIAL EDUCATION INFORMATION IS SUPPLIED FOR SCHOOL ADMINISTRATORS, PRINCIPALS, TEACHERS, AND OTHER SCHOOL PERSONNEL RESPONSIBLE FOR PROVIDING SERVICES FOR HEARING-IMPAIRED CHILDREN IN OHIO. THIS BOOKLET IS DIVIDED INTO FOUR PARTS. PART 1 IS CONCERNED WITH ORGANIZATIONAL STRUCTURE AND ADMINISTRATION OF SPECIAL EDUCATION FOR AURALLY HANDICAPPED AND TEACHER CERTIFICATION. PART 2 IS DEVOTED TO EVALUATION OF THE DEAF CHILD, ADDITIONAL HANDICAPS, HEARING AIDS, AND PARENT EDUCATION. PART 3 DISCUSSES EDUCATIONAL ISSUES IN ADMINISTERING A PROGRAM FOR HEARING IMPAIRED CHILDREN. PART 4 SUPPLIES PROGRAM AND CERTIFICATION STANDARDS, FORMS FOR ADMISSION, REFERRAL, AND EVALUATION, AND INFORMATION ABOUT EIGHT AGENCIES SERVING THE DEAF AND HARD OF HEARING. (MW)

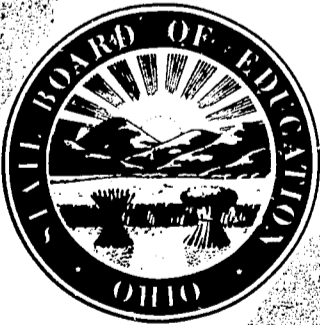
312

ED012138

OHIO'S Programs
for

**HEARING HANDICAPPED
CHILDREN**

EC 000 446



Issued by **MARTIN ESSEX**
State Superintendent of Public Instruction
Columbus, Ohio
1966

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

OHIO'S PROGRAM
for
HEARING HANDICAPPED
CHILDREN

by

J. WILLIAM HARTWIG
Educational Consultant
Audiologist

CHRISTINA C. JONES
Educational Consultant
Hearing Impaired

Under the Direction of
E. C. GROVER
Assistant Director, Division of Special Education



HAROLD J. BOWERS
Deputy Superintendent of Public Instruction

S. J. BONHAM, JR.
Director, Division of Special Education

OHIO DEPARTMENT OF EDUCATION
COLUMBUS, OHIO
1966

FOREWORD

Educational programs and related services offered to all exceptional children in Ohio have expanded and increased steadily in the past years. As the birth rate and enrollment in general education increased, the number of children identified as hearing impaired also increased. This increase created a need for more programs of instruction, an increased number of better trained teachers, additional special equipment, more suitable instructional materials, better diagnostic procedures and additional classroom space in public schools.

Since 1829, educational programs have been provided for the deaf in Ohio. For the past several years there has been a growing interest among educators and parent groups to have special education programs provided for *all* exceptional children in local school districts. For these reasons, the problems that arise in local school districts make it important that school administrators, principals, teachers and other school persons responsible for providing services for children with hearing impairment be informed regarding special education. This publication is being made available to help meet these needs.

S. J. BONHAM, JR.
Director, Division of Special Education

TABLE OF CONTENTS

	Page
INTRODUCTION	vii
PART I	
HISTORICAL EVENTS IN THE EDUCATION OF THE DEAF IN OHIO	3
PRESENT ORGANIZATIONAL STRUCTURE OF THE DIVISION OF SPECIAL EDUCATION	7
ORGANIZATION AND ADMINISTRATION OF SPECIAL EDUCATION UNITS	13
CENTRAL REGISTRY FILE	24
CERTIFICATION OF TEACHERS	25
PART II	
DEFINITION OF DEAFNESS AND INCIDENCE IN THE SCHOOL POPULATION	29
EVALUATION OF CHILDREN	31
THE AUDITORY MECHANISM AND HEARING	41
CLASSIFICATION OF DEAFNESS	43
THE MULTI-HANDICAPPED DEAF CHILD	47
THE APHASIC CHILD	49
GROUP AND INDIVIDUAL HEARING AIDS	50
PARENT EDUCATION	54
PART III	
EDUCATIONAL ISSUES	61
PART IV	
APPENDIX A. PROGRAM STANDARDS	67
APPENDIX B. FORMS	89
APPENDIX C. AGENCIES	109

INTRODUCTION¹

Asked to select the most precious of the five senses, few people would name hearing. Yet of all man's links to the outside world, hearing seems to be the essential sense, the one that makes man peculiarly human.

How precious hearing is becomes clear when it is lacking. A baby born blind or insensitive to pain usually surmounts his handicap to lead a useful life. A baby born deaf may be lost to mankind. The first steps of intellectual development are beyond his reach. The sounds of life—his mother's lullaby, the clatter of a rattle, even his own wowl of hunger—remain unknown. He cannot learn to imitate meaningful sounds because he cannot hear them. Unless heroic efforts rescue him, he will never truly master his own language; he will live cut off from the human race. It is hearing, with its offspring speech, that gives man his superlative capacity to communicate: to pass along hard-won knowledge, to make use of that knowledge, and so to rule an entire planet.

The burden is greatest for those who are completely deaf, for total deafness has devastating effects upon psychological and social life. "I am just as deaf as I am blind", wrote Helen Keller. "The problems of deafness are deeper and more complex, if not more important, than those of blindness. Deafness is a much worse misfortune. For it means the loss of the most vital stimulus—the sound of the voice that brings language, sets thoughts astir, and keeps us in the intellectual company of man". These poignant words describe the frustration of the child who was either born deaf or became deaf at a very early age, and cannot recall ever hearing at all.

For such a child, learning is an unbelievable struggle. The normal child moves smoothly from hearing words to saying them, then goes on to recognize their representations on the printed page. Each successive step he takes is made easier by the preceding one. But the deaf child can never take the first step unaided. To overcome his initial handicap requires a Herculean effort.¹

¹ Reprinted with permission from
TIME-LIFE BOOKS

Stevens, S.S., Warshofsky, Fred, and the Editors of LIFE, Life Science Library: *SOUND AND HEARING*, New York: Time Incorporated, 1965, pp. 9 & 145

PART I

HISTORICAL EVENTS IN THE EDUCATION OF THE DEAF IN OHIO

Ohio is a pioneer in the field of special education and is viewed as one of the leading states in the education of exceptional children. As a State, we have considered it a major responsibility of education to develop, and to provide programs of instruction, which will give each child an opportunity for optimal development commensurate with his potentialities.

The program of educating the deaf is the oldest program in special education in Ohio.

The education of hearing handicapped children has had a long and varied history in our State.

1803—Ohio was admitted to Statehood.

1822—The first legislative action authorized county commissioners to appropriate money for the care and education of "deaf and dumb" children whose parents found it impossible to pay for their instruction.

1827—A Board of Trustees of the "Asylum for Educating the Deaf and Dumb" was established by legislative action.

1829—The first "Asylum for the Education of the Deaf and Dumb" was opened in rented quarters located at the northwest corner of Broad and High Streets in Columbus. Classes were housed in three other such sites in the downtown area during periods of expansion.

1834—The first building specifically known as the Ohio State School for the Deaf was completed on a site purchased on East Town Street in Columbus.

1869—A new facility built on East Town Street at the rear of the former school building was dedicated.

1879—An appropriation of money was made to the school board of Cincinnati by the Legislature for the care of "deaf and dumb" children in that city, due to the overcrowding in the State Asylum.

1898—A law was enacted requiring cities of first class, first and second grades, to maintain schools for residents who were deaf and whose speech was so defective that work in ordinary schools was impossible. The law required a minimum of five deaf pupils before the school district could qualify for state aid.

- 1900—The Legislature appropriated money for the continuation of the program in Cincinnati and for the initiation of a similar program in Cleveland in compliance with the provisions of legislation in 1898.
- 1902—Legislation required truant officers to submit annual reports in July regarding the appropriateness of the education being provided for the deaf children who were residents of their counties.
- 1908—The responsibility for the enumeration of the deaf was transferred to the properly designated officers responsible for the general school enumeration.
- 1910—A law granted the commissioner of common schools the right to set standards for higher educational institutions in the preparation of teachers.
- 1914—Classes for the deaf were opened in Dayton and Toledo public schools.
- 1916—Classes for the deaf were started in Canton.
- 1921—The Director of the Department of Welfare became responsible for the administration of the Ohio State School for the Deaf.
- 1924—The Division of Special Education was established by the Ohio Department of Education.
- 1927—The administrative responsibility for the Ohio State School for the Deaf was transferred to the Ohio Department of Education.
- 1934—The Director of the Division of Special Education employed a trained person to supervise classes for the deaf in public schools.
- 1935—Classes for hard of hearing children were approved by the Division of Special Education.
- 1935—The Ohio Law providing state financial support for general and special educational programs in public schools, known popularly as the School Foundation Program Law, was enacted by the General Assembly in 1935.

1953—The present School for the Deaf located on the former Wyandot Property, 500 Morse Road, Columbus, Ohio, was opened.

1960—The State Board of Education revised the minimum standards for the approval of special education units for the instruction of deaf and hard of hearing children.

1960—The State Board of Education adopted policies relative to the admission and dismissal of children from the Ohio School for the Deaf and approved the establishment of an Educational Evaluation Clinic. This included personnel from the Division of Special Education and the Ohio School for the Deaf.

1961—The State Board of Education adopted and/or revised standards for the certification of special education teachers in all of the areas of education for exceptional children.

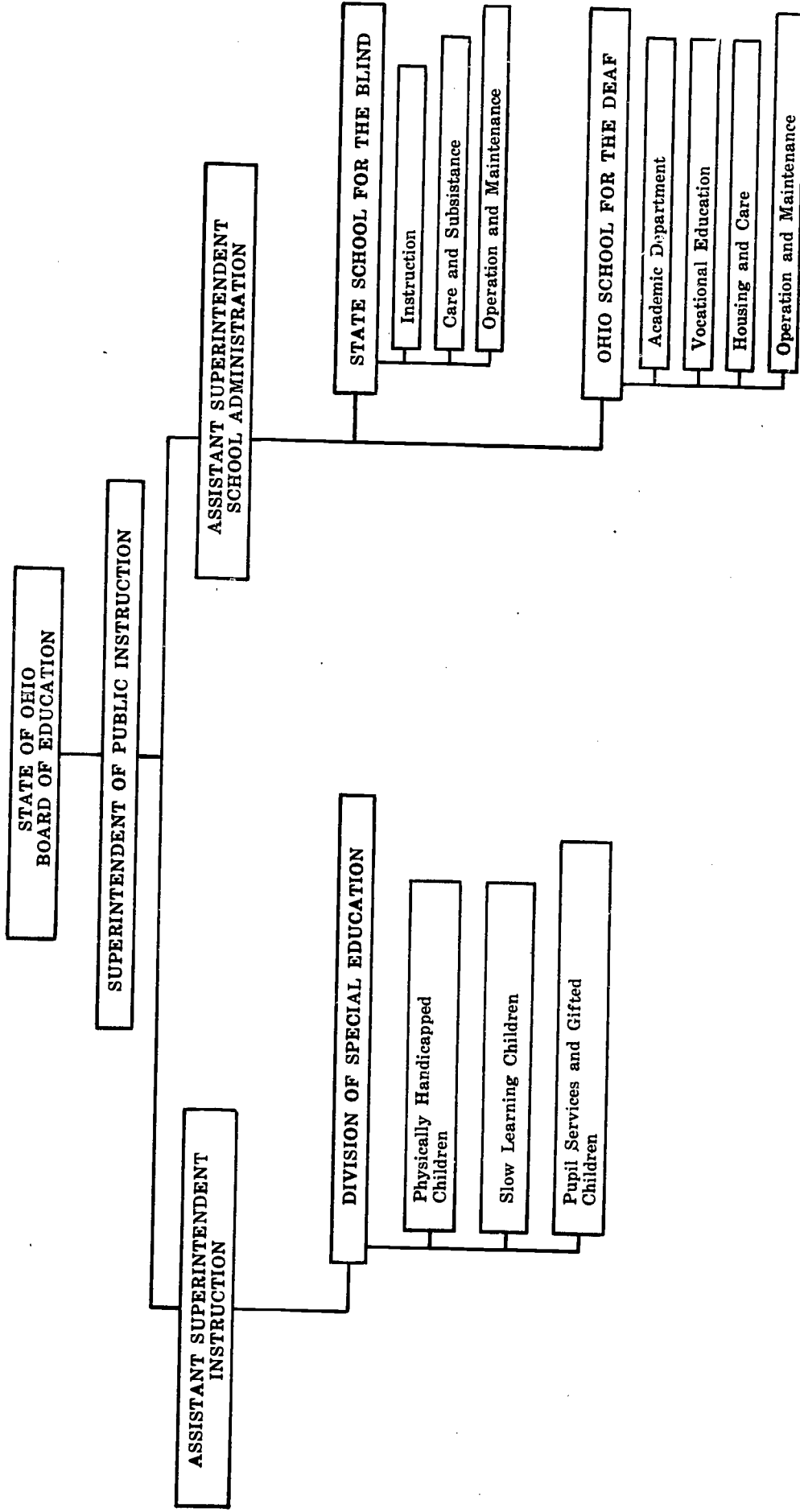
PRESENT ORGANIZATIONAL STRUCTURE OF THE DIVISION OF SPECIAL EDUCATION

As programs for exceptional children have grown and expanded, professional members have been added to the staff of the Division of Special Education. During the past few years, there have been personnel, organizational and administrative changes.

The personnel of the Division currently consists of a director, three educational administrators, one of whom is designated as assistant director, ten educational consultants, a coordinator of special projects, an office manager and clerical staff. The three administrative assistants were appointed in December, 1962, and the assistant director was designated in January, 1966. These assistants are administratively responsible to the director and have program responsibilities for special areas such as, 1) physically handicapped including hearing handicapped, visually handicapped, orthopedically handicapped, neurologically handicapped, 2) slow learning and 3) special services including psychological services, speech and hearing therapy and emotionally handicapped.

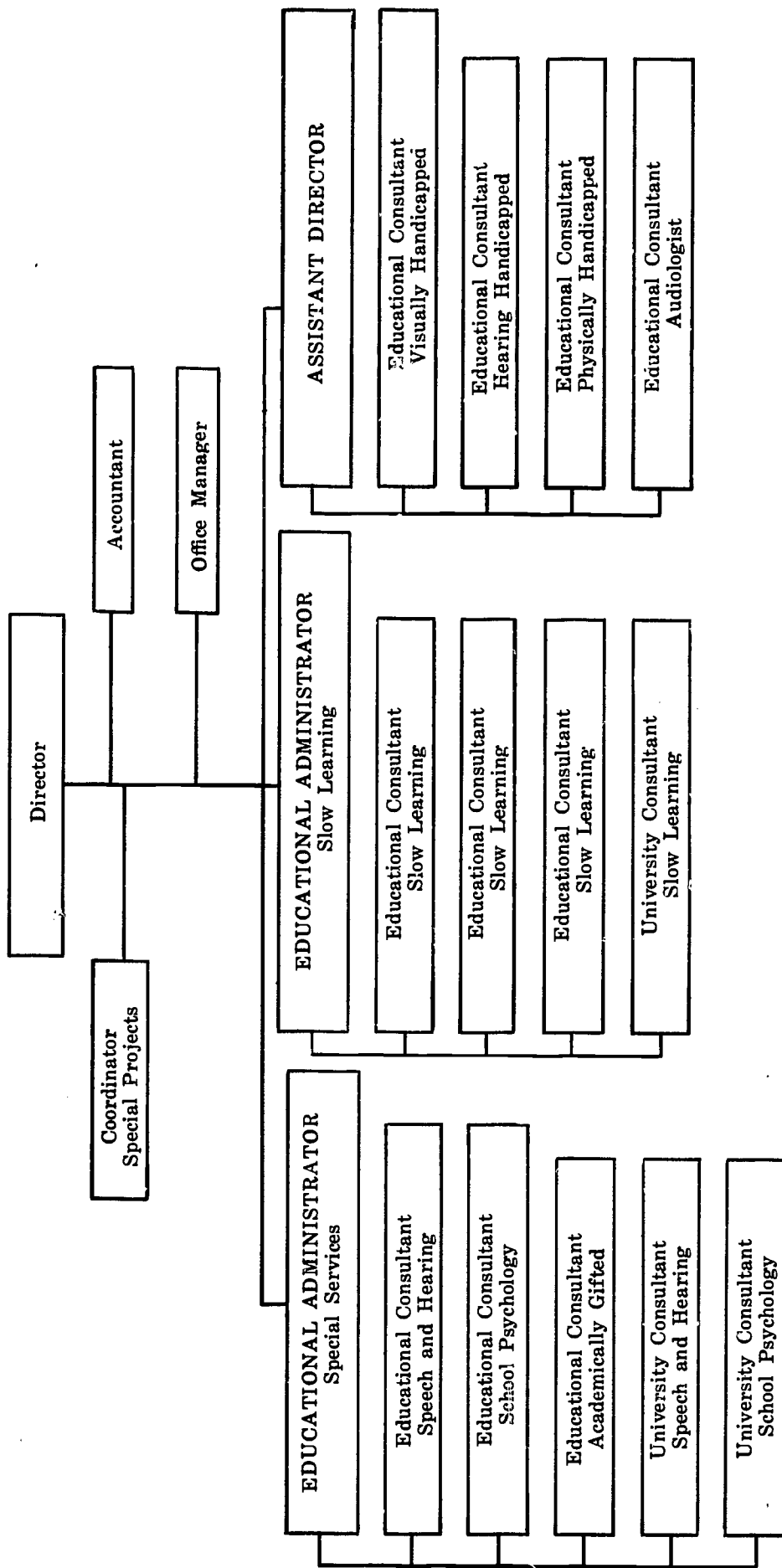
The following charts reveal the organizational patterns in operation in the Department of Education and the Division of Special Education.

(A)
TABLE OF ORGANIZATION *



* Neither the other Assistant Superintendent, nor the other divisions of the Department of Education are shown on this Table of Organization.

(B)
TABLE OF ORGANIZATION
Division of Special Education



ROLE AND FUNCTION OF THE EDUCATIONAL CONSULTANT

The professional staff has a direct mandate from the Ohio Legislature and the State Board of Education to enforce minimum standards in local programs which are partially or fully reimbursed with state foundation money. Since approval for state foundation money is dependent upon maintenance of State Board of Education Standards, the role of the Educational Consultant is necessarily one of regulatory function. Program evaluation is a very small portion of the Educational Consultant's responsibilities. The two major responsibilities of the Educational Consultant are professional field service of which program evaluation is a part, and professional leadership. These responsibilities are not necessarily dichotomous. One cannot do professional field service without incorporating professional leadership. Field visits are made to school districts maintaining units for deaf and/or for hard of hearing children in carrying out the Ohio Legislative mandate. They, also, are made to school districts requesting the consultative service of the Educational Consultant. Following every visit, a summary letter is sent to the local administrator and a copy to the superintendent.

A. Professional Leadership

This area of responsibility has many facets and it is not easily defined; however, the following outline describes some of the functions of the Educational Consultant in assisting local programs to develop and maintain optimal programs and services for hearing impaired children.

1. Professional Literature and Materials

- (a) Establish procedures by which local materials can be exchanged
- (b) Periodically prepare a selected bibliography of significant materials
- (c) Write or prepare materials that are needed but not available

2. Pre-Service Education Programs

- (a) Assist in identifying unmet needs in university programs
- (b) Serve as an instructor on an emergency basis
- (c) Serve as a resource person for university students and instructors

- (d) Assist in the development of new professional curricula
 - (e) Assist in the evaluation and improvement of existing professional curricula
3. In-Service Education Programs
- (a) Provide professional field service
 - (b) Conduct and encourage area professional meetings
 - (c) Encourage and assist professional organizations
 - (d) Encourage and stimulate development of appropriate non-credit workshops and courses
4. Research Studies and Experimental Projects
- (a) Identify research needs
 - (b) Initiate and conduct research
 - (c) Promote and encourage research studies and experimental projects
 - (d) Interpret and disseminate findings and conclusions
5. Professional Relations at the Local, State and National Level
- (a) Maintain membership in professional organizations
 - (b) Attend meetings of professional organizations
 - (c) Contribute to journals of professional organizations
6. Appropriate and Desirable Criteria for Optimal Special Education
- (a) Initiate procedures by which these criteria can be identified
 - (b) Encourage schools to use the criteria in self-evaluation
 - (c) Utilize criteria in professional field service
7. Extension of Present Programs in Special Education
- (a) Identify unmet needs within present standards
 - (b) Assist local districts in establishing new programs or expanding established programs
8. Identification of Emerging Needs for New Programs in Special Education
- (a) Identify unmet needs not now provided for within existing standards
 - (b) Encourage and stimulate the development of pilot studies and experimental programs

- (c) Evaluate results of studies and submit recommendations for needed modifications in existing law and standards

The Division of Special Education has depended upon an Advisory Committee composed of representative people engaged in programs for hearing impaired children for advice and counsel in the revision of standards for the approval of units, teacher certification and general program needs. Meetings of this advisory committee are called by the Director when they are deemed advisable.

ORGANIZATION AND ADMINISTRATION OF SPECIAL EDUCATION UNITS

School districts in Ohio are permitted under statutory provisions to provide for the education of hearing impaired children. If the educational needs are to be met, consideration must be given to those basic needs which are common to both deaf and hearing children, as well as to special instructional needs superimposed by the deafness.

School districts which can provide and maintain adequate, appropriate and continuous educational facilities for deaf children are encouraged to do so. The number of deaf children in any single community is usually small. The day school programs for the deaf, therefore, become "centered" and usually exist in the larger metropolitan areas.

Ideally, special education units for the deaf should be established in school districts in which the population of deaf to be served is sufficiently great to make it feasible to provide groupings within a program that will meet individual needs and yet allow the individual pupil to progress and produce the quality of work at a rate which will be commensurate with his ability. Most of the large cities in Ohio have a sufficient number of deaf children to do this.

Special day classes should be located where they can be reached by the pupils they serve with reasonable convenience from any part of the area which they serve.

Financing of Units for the Deaf and Hard of Hearing

The amount of state funds for each unit for deaf and hard of hearing children will be in accordance with the current provisions of the School Foundation Program. The reimbursement from the State is made directly to the local school district maintaining approved units. All of the expenses incurred in maintaining the special program are paid by the local school district.

Approval of Units

All special education units for deaf children in the public schools in Ohio are approved in accordance with Standards which were adopted by the State Board of Education. These Standards clearly define specific criteria which must be met before approval for financial reimbursement can be granted.

Application forms SE 2.11 and SE 3.11 for unit approvals

are mailed to all local school districts which have established programs and to those superintendents who have notified the Division of Special Education of plans to organize new programs. These forms are mailed to school districts in August or September and must be completed in triplicate and returned to the Division of Special Education in early October of every school year. After the applications are reviewed, they are approved or rejected in accordance with Standards. One copy of each approved application is returned to the superintendent of the school district submitting the application, one copy is filed in the office of the Division of Special Education, and one is used by the educational consultant. If the application for a unit or units is rejected, a letter of explanation is sent to the superintendent of the school district. If the unit or units fail to comply with Standards, the superintendent is alerted to the specific items in need of attention with a request that they be corrected. These units will be approved the following year only if the corrections have been made so that they meet minimum State Standards.

Before new classroom units are established the following should be considered:

1. Expression of the desire of the local school system to provide a special education program
2. Identification of the need and readiness for special classes
3. Completion of the evaluation and the establishment of the eligibility of all potential candidates
4. Provision for financing the cost of materials and equipment and for carrying the program until state funds are distributed
5. Availability of a trained teacher of hearing impaired children
6. Availability of classroom space with appropriate furnishings
7. Provision for an administrator or supervisor to organize, coordinate, evaluate and administer the program, and
8. Arrangement for a continuous program of instruction from preschool through high school either locally or in cooperation with neighboring school districts.

Transportation

In planning transportation, particularly for very young children, school authorities should consider whether or not the travel time and the expense involved are commensurate with the amount of time that the child is actually under academic instruction.

Attention should also be given to the minimum length of the school day as determined by law.

Legislation makes it possible for reimbursement to be made for deaf children and hard of hearing children to be transported to approved special education classes.

Section 14.0 of the State Board of Education Standards related to transportation will be found in the Appendix. To receive State Funds, the application for reimbursement must be submitted for approval to the Division of Special Education.

Tuition

If the local school district cannot provide the services of special education for hearing impaired children, the local school superintendent or his delegated representative may request placement of a child in another school district which provides the program of instruction needed to meet the educational needs of the child. The sending school district must assume the responsibility for excess tuition costs which may be assessed by the receiving school district. This constitutes a contract between the sending and receiving school districts. There is no provision at the state level for reimbursement to the local school district for the excess costs incurred in providing the instructional program.

Boarding Homes

Most of the programs of special education for deaf and hard of hearing children exist in the large cities. Parents residing outside of these city limits, where special education programs are not available, may wish to have their children attend these classes in a neighboring metropolitan area providing such a program. If such a city can accept the child on a tuition basis and provide a continuous program of instruction, the local school superintendent may request such placement. If it is too far for the child to be transported daily, the local school people may request that the child be placed in a licensed boarding home for the school week. The State of Ohio assumes boarding home costs. The outline of procedures for application for boarding homes is found in the Appendix.

Special Education Programs

In the United States at the present time, it is possible for children to be educated in public, private and parochial schools. In Ohio, there are twenty-two metropolitan areas maintaining approved special education classes for hearing impaired children in

public day school classes. There are more than a thousand children enrolled in these programs annually. The classes are located in school buildings with hearing children. In one city classes are maintained in a separate facility.

In addition, a residential facility which is also a public school provides an educational program on a resident and day pupil basis. The Ohio School for the Deaf is located at 500 Morse Road, Columbus, Ohio. It offers academic and vocational curricula. The school is a division of the Ohio Department of Education and is one of the free public schools.

How Children are Identified

It is possible for hearing impaired children to be identified in several ways in Ohio. Many times physicians are the first to identify those with suspected hearing problems. If a child with hearing loss is not identified before entering school, the kindergarten teacher or first grade teacher may identify him quickly. The hearing screening program conducted in the local school by nurses or speech and hearing therapists assists in identifying the school age child with hearing loss. Children may also be identified through programs conducted by any of the following:

- Clinics conducted by Health Departments,
- Privately financed Speech and Hearing Centers and Clinics,
- Speech and Hearing Centers in colleges and universities,
- Social Welfare Agencies,
- Out-patient clinics of hospitals,
- Society for Crippled Children, etc.

Class Placement

Wherever the child is identified, the examiner should refer the parents to the local school superintendent of the district of residence immediately, even though the child may be too young for school placement. In this way, the local school superintendent, having the necessary information concerning the child for the census, and being aware of existing special education classes, will be in a position to make appropriate placement when the child is ready for a formal school program. If consideration is being given to the placement of the child at the Ohio School for the Deaf, the local school superintendent should refer the name of the child to the Director of the Division of Special Education for clinical evaluation to determine eligibility and readiness for placement.

Before young deaf children are accepted in any program of public education, they should have mental readiness, physical maturity, emotional stability and social maturity to be able to profit from placement in an educational program for deaf children at the beginning level. The eligibility of all potential candidates for these classes should be determined prior to their assignment to classes for the deaf or hard of hearing. It appears to be a wise practice to accept children and place them in classes initially on a trial basis. No child should be accepted unless an appropriate, continuous program is available.

Deaf children are often grouped according to levels other than the traditional grade levels in classes. Usually one class should be planned for preschool children and one class for each of the other educational levels. The levels referred to are primary level (comparable to grades one, two and three), intermediate level (grades four, five and six), junior high level (grades seven, eight and nine) and senior high level (grades ten, eleven and twelve). These groupings are presented only as a guide and will always depend upon the type of organization that is used in the school district.

Considerations for Local Program Coordinators

Although the responsibility for the assignment of children to classes is legally vested with the superintendent of schools, he may delegate this responsibility to a member of the staff.

He will have the responsibility for determining policies relative to the following:

- 1. Promotion**

Even when deaf children have average ability, their language development and skills of communication will lag behind that of hearing children. Since this is true, the promotion of deaf children should be based upon the reasonable achievement of average deaf children, and not in terms of achievement appropriate for hearing children.

- 2. Assignment of Deaf and Hard of Hearing Children to Regular Classes**

Most educators of the deaf agree that it is usually not good educational practice to assign deaf children to regular classes with hearing children at the elementary level. At this level, deaf children generally do not have enough lipreading skill, speech skill, language development or

general achievement to effectively and profitably participate in classes with hearing children. If deaf children are assigned before they have the necessary skills, they are confronted by an intolerable learning situation, for they are emotionally isolated and, in addition, socially and emotionally frustrated by the situation. The program of instruction for hearing children demands a sharing of ideas, information, experiences and a use of communicative skills at a level that usually exceeds that of which deaf children are capable. They are being denied success experiences and an opportunity for class participation.

At the junior and senior high levels, great care should be exercised in assigning children to regular classes. Most deaf children need a continuation of instruction by a special teacher in order to be successful at these advanced levels. Regular observation of junior and senior high students by the special teacher and coordinator should be scheduled, and program adjustments provided where needed.

No deaf child, particularly one who has lost his hearing in late childhood and who has acquired speech and language naturally, should be denied an opportunity for part-time assignment in a regular class where he can participate successfully.

3. Suggestions to Teachers for the Management of Hearing Impaired Children

A few children with mildly impaired hearing will not be eligible for placement in a special education class under the existing criteria. Therefore, it is necessary that regular classroom teachers have some guidelines to assist them in the instruction of these children. Very often the speech therapist should consider including these children in her case load. This supportive service should provide speech correction but the major emphasis should be in lipreading drill and practice, auditory training and language improvement.

The following suggestions may prove to be helpful to teachers who provide instruction for children with hearing impairment in regular classrooms. In addition to those children with mild hearing impairment who are regularly enrolled in their classes on a full time basis, they may also have a responsibility for children who are enrolled in

special education classes, but who participate in their class class for some part of the school day.

A. Seating

Any child with a hearing impairment should be permitted to sit close to the teacher, but not so close that he has to look up in order to lipread. If the teacher takes a position next to the front seats, then the child should be placed in the second seat from the front. If the teacher changes her position, she may find it advisable to encourage the hearing impaired child to move nearer to the scene of her activity and that of the children.

Good educational practice seems to indicate that children wearing hearing aids and depending upon lipreading, find the most advantageous position to be five to ten feet from the speaker. Therefore, children need to be provided the opportunity to take advantage of this optimal position.

B. Lighting

Although the building code specifications provide for sufficient foot candles of light in classrooms, a major consideration for hearing impaired children should be to provide seating between the windows and the usual position of the teacher in such a way that her face will be lighted and not be obscured by glare from behind her head. Teachers should be encouraged to do the major part of their discussion facing the children. They should avoid concealing their faces with books, papers, or other materials. When writing on the chalkboard while talking, they should be encouraged to face the children.

C. "Listening Helpers"

A child with normal hearing seated near the hearing impaired child should be appointed to assist this child in classroom participation, in locating correct pages, in writing assignments for outside work and in checking understanding of oral directions.

D. Participation

Hearing impaired children should be encouraged to participate in special activities such as movies, field

trips, special art projects, games, sports, folk dancing and special assembly programs. These activities will help these children to feel a part of the entire school program rather than apart from it. Any ingenious ways that can be used to draw any withdrawn, insecure child into group activities will be helpful.

E. Communication

Teachers should be encouraged to concern themselves with the thought, idea or concept a child is trying to express rather than the child's incomplete language or faulty speech. The speech of teachers should be natural, normal in rate, free of exaggerated movements and the use of gestures minimal. They should be aware of the many words that look and sound alike. Very often a child's speech will improve as he gains confidence in his ability to use it successfully. Be aware of the fact that the hearing impaired child's vocabulary may be limited. If he fails to understand you, re-phrase your thought in simpler words and more familiar language.

F. Individual Standards

Teachers should demand the same standards of courtesy, promptness, neatness, attention, work habits, sharing and completing assignments from the hearing impaired child that they demand from any other child.

G. Assignments

Writing homework assignments and special assignments on the chalkboard should prove to be very helpful. The hearing impaired child should have a small notebook for recording such assignments. This will be helpful to the parents as well as to the child. It will serve to focus attention upon assignments to be completed and emphasize their importance. Teachers should be certain that they have the child's attention before they make assignments orally.

4. Selection of Classroom

A classroom for deaf pupils should be large enough to accommodate the special equipment and teaching materials used in instruction. The instructional program for the deaf demands that classroom space be adequate for demon-

stration and dramatizations which often form a large part of the daily work.

Classrooms should have electrical outlets suitably located to permit the use of group hearing aids and visual aid equipment. Adequate lighting is essential. The light should be of steady intensity. Glare and reflections should be avoided. The room should be arranged so that no child will be required to look into a source of light when lipreading either his classmates or the teacher. It should be possible to darken the room so that film strips, slides and movies can be used for teaching purposes.

Classrooms should be located in a quiet part of the building and be as free from outside noises as possible. Ideal conditions in classrooms would suggest sound-proof treatment of floors, ceilings and walls. Most classrooms can be adapted for use with favorable results with only minor changes being necessary.

First floor classrooms are most suitable for young deaf children. Easy and rapid access are important, for this enables the teacher to arrange for short field trips without disturbing other classes.

5. Equipment and Materials

Much of the equipment provided in classrooms for the deaf is similar to that found in classrooms for hearing children of comparable age. The classroom should be equipped with steel file cabinets for keeping files and records of children; pictures; instructional materials used in lip-reading, language, speech, vocabulary building and other suitable activities. A mirror mounted in a way that is suitable for use in teaching speech should be provided so the deaf child can see the speech positions and observe the articulation of speech sounds.

Group hearing aids should be a part of the equipment in every classroom. They may be obtained from any of several companies manufacturing and distributing auditory training equipment.

Chalkboards are used extensively in teaching deaf children. The amount of chalkboard provided in any classroom should be based on at least three linear feet per child enrolled in a specific class. The height of the chalkboards should be suitable to the age and height of the children using them.

Plymouth charts and suitable stands or frames for holding materials should be available in all classrooms. Since most of the charts and other instructional devices are teacher made, it is difficult to list specific provision for materials. The ideal classroom makes provision for such areas as a play corner, a science corner, a library corner, and displays and exhibits depending upon the age level of children.

6. Curriculum

It is very desirable in any good program of instruction that one system of teaching speech, language, lipreading, auditory training and all regular subject matter be adopted. There does not seem to be any specific curriculum guide that can be adopted universally for use in the various programs of instruction for hearing impaired children throughout the country. The curriculum guides and the method of approach varies from one teacher education program to another. Graduates of the many such programs, however, should be aware of the fundamental principles involved in the development of speech and language, lipreading, auditory training and the basic techniques required in teaching subjects such as math, reading, science and social studies. It then becomes the responsibility of school administrators and teachers of hearing handicapped children to work together at the local level to devise suitable curriculum guides. They should clearly define content, procedure and technique. As children are promoted, less time will be lost in review of the previous year's work before beginning instruction for the current year. In addition, haphazard program planning will be eliminated. This is one way of assuring deaf children the opportunity to enjoy a complete, fully enriched, uninterrupted sequence of programmed instruction within a set structure.

7. Length of School Day for Special Education Classes for the Deaf

The general practice in special education classes for the deaf or the hard of hearing with regard to length of school day is the same as that in general education. The exception in this area of education is that of accepting, assigning and scheduling deaf children of preschool age. In systems where preschool classes are organized and

maintained, deaf children may be assigned on a half-day basis with children of comparable age and ability. Great care should be exercised, however, in organizing these classes to assure that the teacher and child have sufficient time for instruction to make it a worth-while educational practice.

CENTRAL REGISTRY FILE

The Division of Special Education maintains a registry file of deaf and hard of hearing children in the state of Ohio. This file was started in 1960. It contains pertinent information such as the child's name, age, average hearing loss in the speech range, intelligence quotient, school district of residence, parents' names and the child's current school placement. The information is kept current from the information submitted on the unit application forms submitted for approval in October, and from the census referral forms which are completed in February of each year.

The file includes information relative to children approved for individual tutor instruction, children referred to rehabilitation agencies, children awaiting school placement, children transferring from one program to another, children who are graduated, and children who are dismissed from programs.

In addition to the registry data, a complete clinic report is filed for all children who have been evaluated by the Educational Evaluation Clinic Team. Each clinic report includes the recommendation prepared by the Assistant Superintendent of Public Instruction following action of the Central Review Committee. A complete medical report for all children who have been seen for evaluation by the Medical Clinic Team is also included in the file. This information should be of statistical significance in the future and should appreciably assist those concerned with improving or expanding programs for hearing impaired children.

CERTIFICATION OF TEACHERS

Preparation of Teachers

The person who chooses to teach deaf children should possess all the qualities that are essential for any good teacher and the same general professional training that is required for teachers of hearing children. In addition to this, specialized training must be required. The routine of teaching the deaf is an exacting one. It is doubtful that any other handicapped child relies as heavily upon the teacher as the deaf child.

In all areas of special education, securing trained, qualified teachers has been a very difficult problem. It has been especially difficult to acquire trained teachers for children with impaired hearing. There is a critical shortage of trained personnel in this area throughout this country. This situation reportedly exists throughout the world.

The State Board of Education adopted new rules and regulations for issuing special certificates in all areas of special education December 11, 1961, which became effective January 1, 1963.

The section dealing with requirements for certification for teachers of deaf children and teachers of hard of hearing children as they appear in the new law and regulations will be found in the Appendix A.

PART II

DEFINITION OF DEAFNESS AND INCIDENCE IN THE SCHOOL POPULATION

Although numerous individuals and groups have set about to define deafness, there is no universally accepted definition. There are, however, significant statements which merit study by those concerned with the education of deaf children.

One generally accepted definition is that of the Committee on Nomenclature of the Conference of American Schools for the Deaf—"The deaf are those in whom the sense of hearing is non-functional for the ordinary purposes of life." This group includes two distinct classes based entirely upon the time of the loss of hearing: (1) the congenitally deaf—those born deaf and (2) the adventitiously deaf—those born with normal hearing but in whom the sense of hearing became non-functional through illness or injury. The hard of hearing, as defined by this same committee, are "Those in whom the sense of hearing, although defective, is functional with or without a hearing aid."

These definitions are helpful guidelines in distinguishing between deaf children and hard of hearing children for instructional purposes. Neither definition, however, delineates the degree of hearing loss, nor the effect of the impairment upon the acquisition of speech and language in defining a child who is deaf or a child who is hard of hearing.

For educational purposes in Ohio, the deaf are those whose hearing losses range from an average of 70 decibels (ISO-1964), in the speech range in the better ear to the inability to detect sound at any test frequency at the highest intensity level produced by the test equipment. This encompasses those who have been unable to understand and acquire normal speech and language through the sense of hearing even when sound amplification was provided.

Parents, educators, and the general public sometimes refer to children as hard of hearing, when from the standpoint of instructional needs, they are deaf. Conversely, the same people frequently refer to children who are deaf as being hard of hearing.

Every definition of deafness should emphasize in addition to the amount of hearing loss the ability of the individual to acquire speech and language. This provides a more comprehensive guide for determining whether a child needs an instructional program for the deaf or one for the hard of hearing. It must also be remembered that two children having almost identical hearing losses

may use their residual hearing quite differently and thus not have the same educational needs with respect to special education programs.

Educators and administrators of programs of education for the deaf must always consider the child's ability to use his hearing. If a child with an appreciable hearing loss cannot understand and acquire speech and language through his hearing, with or without the use of a hearing aid, he is educationally deaf.

Incidence

Defective hearing is the most common physical impairment in the United States today. One out of every 20 Americans has some degree of hearing loss. Over 300,000 are so deaf that they cannot hear human speech, no matter how strongly amplified.²

Statistically, estimates of the number of children with hearing impairment vary widely. It is a well-established fact that this variation is likely to exist until uniform systematic hearing testing and reporting have been in operation over the entire country for a number of years. The incidence of deafness as reported by various investigators varies from as low as two percent to as high as twenty-one per cent of the school population. The variations in findings may be due to different methods of testing, different pass-fail screening criteria, the calibration of test equipment and the presence of noise in the test environment. These percentages reflect all children whose hearing deviates from "normal", regardless of the degree of the hearing impairment. Throughout the past few years, there has been a general trend to accept the estimate of approximately five per cent as a rather representative expectancy rate of children with medically significant hearing losses found in any school population. It must be remembered that the five per cent estimate does not mean that all of this number of children have sufficiently great hearing impairment to handicap them in their activities or educational programs.

² Ibid., 145

EVALUATION

Section I

Hearing

Persons of all ages may experience loss of hearing. The defect of hearing can be either partial or profound. It can be present in the low, middle or high frequencies or in any combination. Only when the loss of hearing is severe to profound do we speak of deafness.

Hearing loss implies that a person has a reduction of auditory function. For all practical purposes a person begins to become socially inadequate when his hearing loss in the better ear reaches or exceeds an average of 40-45 decibels (dB) in the "speech frequencies"—500, 1000 & 2000 cycles per second (cps). In the case of hearing loss characterized by a very mild hearing loss in the low frequencies and a steep decline in the audiometric contour for the middle and high frequencies the average should be for only the two better frequencies in the speech range. This more nearly represents this person's ability to hear speech.

Among hearing tests commonly employed in the past were the whispered and spoken voice, coin click, watch tick and tuning fork. These tests provide little quantitative results, particularly when evaluated by inexperienced examiners. Much better quantitative and qualitative tests of hearing are made today employing electronic instrumentation.

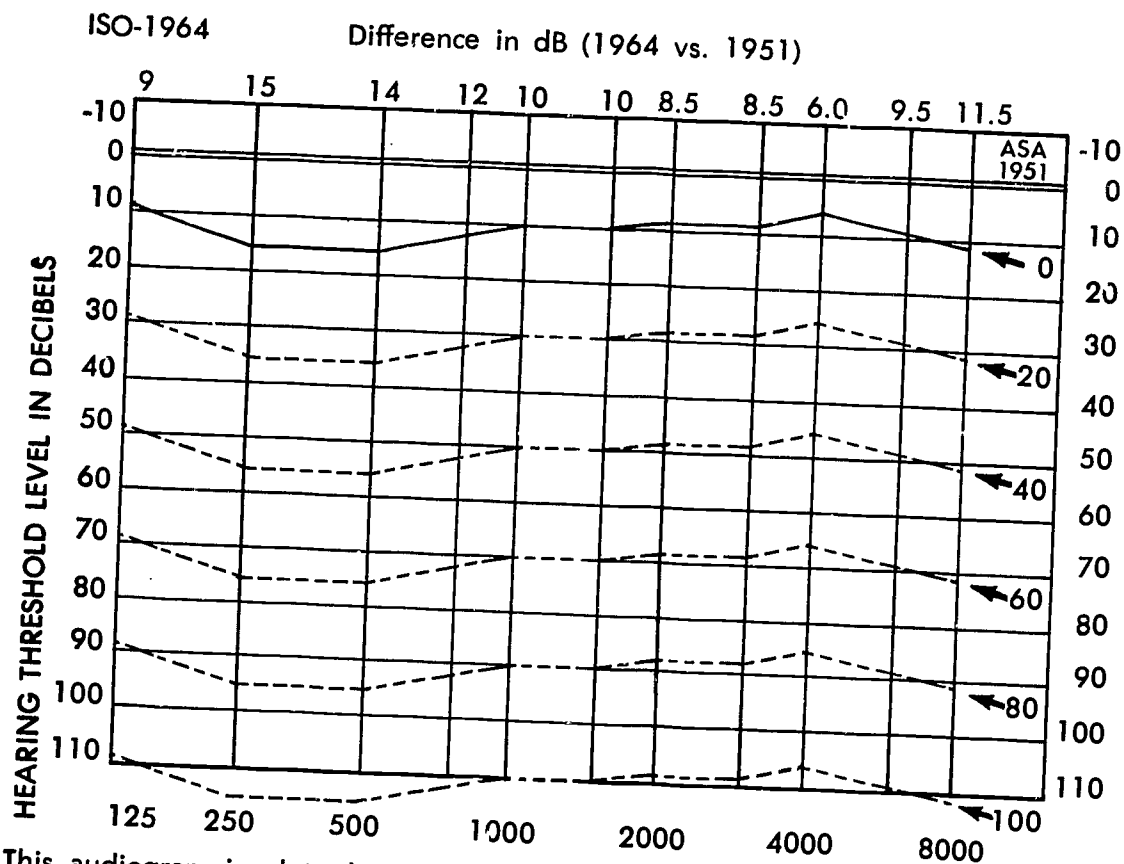
Pure Tone Audiometer

The pure tone audiometer is an electronic instrument used to measure hearing for pure tones. It produces pure tones of known frequencies (pitches) and intensities (loudnesses). Most audiometers make provision for testing the frequencies 125, 250, 500, 1000, 2000, 4000 and 8000 cps. Often the frequencies of 750, 3000 and 6000 cps are also included. Clinical audiometers provide for pure tone testing by both air conduction, using headphones, and bone conduction, using a bone conduction oscillator.

Sound intensity is expressed in units called decibels. Commercially available audiometers usually are capable of producing sound stimuli over a range of 0 decibels to 110 decibels (ISO-1964).

Except in clinical test settings where especially sound treated rooms are installed for "field testing," most hearing tests are completed monaurally—individual ears under headphones. The results are recorded on audiograms.

Pure Tone Audiogram



This audiogram is plotted on the basis of:

- 1964 ISO reference thresholds
- 1951 ASA reference thresholds

Readings obtained on an audiometer calibrated to the 1951 ASA thresholds may be converted to, and plotted as, "Hearing Threshold Levels" based on the 1964 ISO reference thresholds by adding the appropriate "Difference in dB" at each frequency. To convert readings based on the 1964 ISO reference thresholds to readings based on the 1951 ASA reference thresholds, SUBTRACT the "Difference in dB".

The audiogram is a graphic representation of hearing acuity for pure tones. The various test frequencies (125, 500 cps., etc.) are indicated on the horizontal line at the bottom of the above audiogram. The low frequencies are found on the left portion of the audiogram while the higher frequencies are found as one progresses toward the right. Hearing threshold levels for the various intensities in decibels (0, 10, 20, etc.) are represented along the vertical line at the extreme left of the graph for ISO values and on the extreme right for ASA values.

The zero line running horizontally across the audiogram represents the average intensity level at which each test frequency can just be detected by the "normal" ear. Persons with hearing loss will have the pure tone audiometric findings recorded below the 25 dB threshold level for the frequencies tested. The farther the symbols fall below this level, the greater is the hearing loss.

The intensity threshold for each frequency by air conduction is usually indicated by a blue cross for the left ear and a red circle for the right ear. Bone conduction thresholds employ the same color scheme, but a bracket to the right or left of the vertical frequency line is recorded. An arrow extending downward from any of these symbols indicates that the person gave no response at the maximum intensity of the audiometer for that particular frequency.

International Audiometric Zero or ISO-1964

During 1964, the International Standard Organization announced its recommendation for an international reference level for pure tone audiometers. Professional organizations quickly endorsed the recommendation and favored the early and universal use of the new ISO-1964 scale which would provide a better representation of the hearing threshold curve of young adults and terminate the confusion that had previously existed due to the use of standards in the United States that were unlike those used in most European countries.

Prior to 1964 and the adoption of the new standards, the audiometric thresholds were designated as the ASA-1951 scale (American Standards Association). The difference between ASA-1951 and the ISO-1964 (International Standards Organization) scales is approximately 10dB. Specifically, you will note under "Differences in dB (1964 vs 1951)" at the top of the audiogram that the exact differences range from 6 to 15 dB, depending upon the particular frequency under consideration. By referring to the small print provided at the bottom of the new audiogram blanks, the relationship between these two scales and the procedure for converting from one value to another is clearly defined.

To assist in determining the eligibility of children for Special Education Units according to the Standards adopted by the State Board of Education, it is necessary to compute *average* pure tone hearing thresholds for the "speech range" (500-1000-2000 cps) for the better ear. When converting one scale to another (ASA versus ISO or vice versa) using the same conversion principle as stated for individual pure tones, the dB difference of 11dB should be used. With reference to the Units for Deaf Children, the 60 dB figure with regard to degree of hearing impairment should be 70 dB when using ISO standards. Under Units for Hard of Hearing, the 40 dB loss should be replaced by a 50 dB hearing threshold for those using ISO pure tone audiometric data.

Speech Audiometry

Most clinical audiometers also make provision for examiners to include sound stimuli other than pure tones in their test battery, such as recorded materials and spoken voice presentations. The spoken voice of the examiner is often referred to as a "live voice" stimulus. Two types of word material are used when possible.

1. **Spondee word lists** are composed of bisyllabic words with each syllable receiving the same stress, such as "railroad," "cow-boy," "sidewalk," "birthday," etc. The intensity level at which the listener can correctly repeat at least half of the words is called his speech reception threshold (SRT). This represents an auditory acuity threshold.

2. **Phonetically balanced word lists** constitute another type of speech auditory test material. These lists consist of one-syllable words such as "tree," "by," "ice," "eat," etc. They have been selected because they approximate the distribution of speech sounds in ordinary conversation. The words are presented at an intensity level approximately 30 decibels above the speech reception threshold as measured by using the spondee word list. This insures that the subject can hear all of the material easily. The person with normal hearing may hear and correctly repeat all or nearly all of the words. The person with a sensori-neural or nerve type hearing loss will hear the words but may miss every word no matter how loudly the words are presented because he cannot hear distinctly. These findings are expressed in percentage discrimination. The person with an unsatisfactory performance is usually referred to as one with inability to discriminate the speech he hears. He hears the sound and realizes someone is speaking, but he cannot distinguish between words of similar phonetic composition. The person often remarks, "I can hear you, but I cannot understand you." The discrimination ability may prove the difference in a person's ability to use an individual hearing aid or not use one effectively. A hearing aid can make the sound louder but can contribute nothing toward making the sound more intelligible.

Psychogalvanic Skin Resistance Audiometry

This is presumed to be a more objective test and is sometimes useful for persons who appear to be functionally deaf or with children who are too young to be tested with conventional test equipment and procedures. The conditioning is accomplished by introducing electrical shock followed quickly by a test tone. When

satisfactory recorded responses are obtained, sound alone is presented. The sweating and lowered skin resistance responses resulting from the shock presentation during the conditioning period will usually continue when sound alone is presented. The change in the galvanometer reading as indicated by a pen tracing on a moving paper every time a sound is presented is accepted as evidence that the person heard a specific auditory stimulus at a given intensity. This test is not used except in a clinical setting.

Screening Procedures

The Ohio Law makes provision for administering hearing and vision tests for children in school districts where physical examinations are required. The screening methods and test procedures are prescribed by the department of health.

Testing the hearing of children in public schools serves several purposes. It helps to identify pupils with hearing loss; to refer for further examination, diagnosis and medical care; to inform parents, teachers, nurses, supervisors, school administrators of a pupil's ability to hear; to identify pupils for special education class placement; and to provide the basis for making needed adjustments in the educational program.

The number of children to be screened in a given school district depends upon the number of available personnel to conduct the follow-up work and the medical and educational facilities available locally. Procedures to routinely test all new children entering school; children in grade one, three and six in elementary school; children referred by teachers, parents, nurses and physicians; and children who failed the hearing screening test the previous year are recommended.

Services of hearing consultants for assistance in the initiation, organization and evaluation of hearing conservation programs may be obtained from the Ohio Department of Health or any one of its regional centers.

Medical Follow-up

Children who fail to meet certain pure tone auditory threshold criteria may be referred to a physician for examination, follow-up study, and recommendations relative to treatment or possible surgical procedures.

Section II

Psychological

The evaluation of deaf children has presented problems for psychologists due to the limitations of the speech and language. There have been some general misconceptions that: (1) deaf children cannot be given psychological tests, (2) psychological test results for deaf children cannot be accepted, (3) the performance observed was due to lack of stimulation, motivation or inappropriate instruction, (4) the performance sections alone of psychological tests are adequate for evaluating the mental functioning level of deaf children.

Psychologists no doubt find it difficult to make specific educational recommendations because there are no studies which have attempted to develop specific criteria for predicting the level of mental ability necessary for children to develop intelligible speech and a facility to use language. Children who have no hearing loss seem to develop speech and language in relation to their mental ability. It seems reasonable, therefore, to suppose that this is also true for children with hearing loss, thus compounding the communication problem for those of below normal mental ability.

Deaf children can be evaluated by psychologists when an appropriate instrument is used. The test results can and should be interpreted carefully to both parents and educators and should include pertinent information relative to physical and motor development, emotional and social behavior observed during the psychological evaluation and implications of the findings, for rate and possible ultimate level of future academic achievement when possible.

Intelligence tests that rely upon language growth and verbal instructions or responses are not appropriate for use with deaf children who have very limited facility with language.

Most of the school psychologists who evaluate deaf children in Ohio prefer to use the Leiter International Scale. A number of studies of psychological instruments, which have been completed in the past few years, seem to suggest that the Leiter has been the best single predictor of readiness of deaf children for initial placement and of academic progress in school programs.

A study, "Predicting Achievement for Deaf Children," completed in 1963, by the Division of Special Education in Ohio, in cooperation with the Dayton School District would appear to favor the use of the Leiter as one of the primary instruments for evalu-

ating children, particularly for young pupils who are potential candidates for school programs.

Children whose hearing loss is not great and who have adequate language ability do not require specially constructed non-verbal tests. Scales used for measuring the intelligence of both deaf and normal hearing children may be used with hard of hearing children, depending upon the nature and degree of hearing loss and their facility in communication.

Psychologists charged with the responsibility of evaluating deaf children are invited to contact the Division of Special Education when in doubt about test materials, evaluation procedures or the interpretation of test results.

Section III

Educational

Children entering or enrolled in classes for the deaf are, because of the hearing handicap, usually educationally retarded by comparison with hearing children of the same age. It is true that in addition to the usual low educational achievement of these children, their rate of progress will be slower than that of hearing children of the same general mental ability. Test results are difficult to interpret since standardization of available achievement test materials has been made with children who hear and because grade levels for classes for deaf children are usually not comparable to those for children in regular classes.

Any person who administers educational achievement tests to deaf children should be aware of the language development, learning and communication problems of the deaf. The tests that are selected for use should conform to the curriculum and subject matter that is being used with the children being tested. The test vocabulary included in the directions must be within the understanding of the children. The person administering tests should make sure that each pupil understands the directions. Samples of test material written on the chalkboard and adequate demonstrations of each type of response desired should be given preparatory to the test administration.

There are many achievement tests available commercially. In addition, editors of reading series textbooks have prepared special reading tests for evaluating this particular academic area.

Section IV

Evaluative Procedures of Children for Placement at the Ohio School for the Deaf

In 1960, policies relative to the admission and dismissal of children from the program at the Ohio School for the Deaf were adopted by the State Board of Education. Children to be considered for admission are referred to the Educational Evaluation Clinic maintained by the Ohio School for the Deaf and the Division of Special Education. This clinic is held monthly throughout the year at the Ohio School for the Deaf. Hearing, psychological and educational evaluations are made without charge. Clinic appointments are made only upon request from the superintendent of the school district in which the child legally resides. Parents seeking an appointment should make their request directly to the local superintendent of schools.

Findings of the Educational Evaluation Clinic Team are reported to a Review Committee consisting of three members appointed by the State Board of Education. Membership on this Committee at the present time consists of the Director of Special Education, the Superintendent of the Ohio School for the Deaf and one member appointed by the Superintendent of Public Instruction. It reviews each case individually and makes a recommendation to the Office of the Assistant Superintendent of Public Instruction on the basis of the child's educational needs, the availability of suitable programs in the state, and the preference of the child's parents relative to educational placement. The recommendation from this latter office is sent to the superintendent of the local school district. He then has the responsibility for sharing both the findings and the recommendation with the parents and all members of the school staff involved in programming the child. He may also notify community agencies directly involved in implementing the recommendations.

Children may be referred for further examination and study to the Medical Clinic Team, consisting of a pediatrician, ophthalmologist, otologist, otolaryngologist and a neurologist. The services of this team are provided through the cooperation of the Ohio Department of Health. This clinic is held monthly during the school year. A complete report of the Medical Clinic Team is forwarded to the Central Review Committee. Any further suggestions resulting from this medical evaluation will be sent in a written report to the local school district. All children referred to the

medical clinic must have been seen initially by the Educational Clinic Team.

Children already enrolled in special education classes may be referred for evaluation by the Educational Evaluation Clinic Team if the local school authorities feel further study seems warranted.

THE AUDITORY MECHANISM AND HEARING

Hearing results from the action and interaction of both the ears and the brain. The two must function together. They constitute the mechanism for hearing. If either organ suffers damage, the result may be defective hearing, usually directly related to the amount and the location of the damage. The ear collects the sound vibrations or sound waves, conducts them from one portion of the ear to another and changes them into nerve impulses. Nerves carry these impulses to the brain where they are interpreted in terms of some related or associated experience.

The ear itself has three major divisions, the outer ear, the middle ear, and the inner ear. The *outer ear* consists of the visible part of the ear attached to the side of the skull and the external canal leading inward. The function of the outer ear is to collect and carry the sound waves in through the canal to set the eardrum in motion. The eardrum is a membrane which divides the outer ear from the middle ear.

Immediately behind the eardrum is the *middle ear*—a small air-filled cavity located in the temporal bone of the skull. It lies between the outer and inner ear. The eardrum marks the outer boundary, and the inner cochlear wall marks the inner boundary of the middle ear. Located in the middle ear cavity are three small bones commonly known as the “hammer,” (malleus) the “anvil” (incus) and the “stirrup” (stapes). The hammer is attached to the inner surface of the ear drum. Joined to the inner portion of the hammer is the anvil. In turn, the anvil is joined to the third bone of the chain, the stirrup. The innermost portion of the latter bone is the footplate of the stapes which fits neatly into the oval window located in the base of the cochlea where the middle ear terminates and the inner ear begins. The chain of bones is joined together in such a way as to permit it to have vibratory movement in the middle ear.

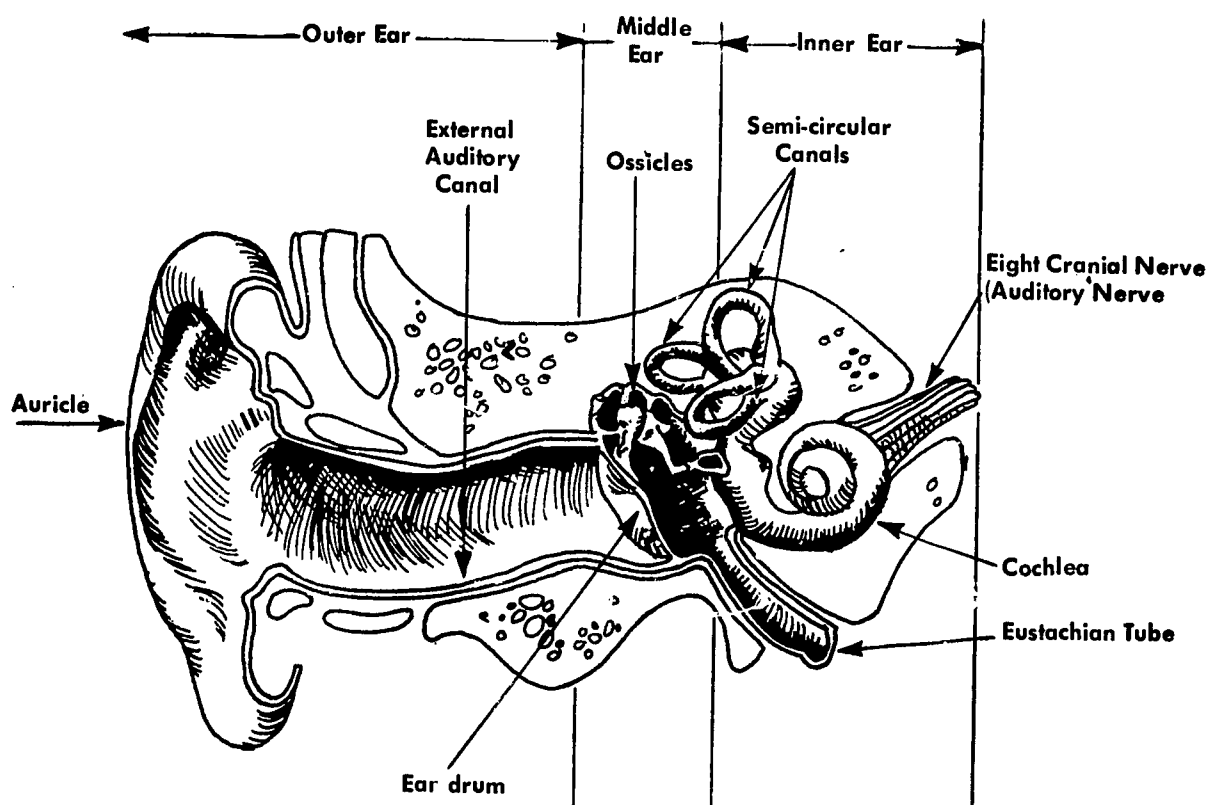
The *inner ear* is that portion of the ear composed of the end organ receptors of hearing in the *cochlea*, the sensory cells of equilibrium in the three *semicircular canals*, and the *vestibule* containing the utricle and the saccule. The cochlea is coiled like a snail, having two and a half turns. Associated with this and contiguous to it are the three semicircular canals. All of these inner ear structures are filled with fluid and are found in the temporal bone. The bony capsule which surrounds the inner ear is the most compact bone of the body and protect these structures to a great degree from mechanical damage. Nerve fibers from the cochlea

come together to form the eighth cranial nerve which carries nerve impulses to the auditory centers of the brain.

The Eustachian tube, which has its lower opening in the back of the throat, has its upper opening in the floor of the middle ear cavity. Its function is to equalize the air pressure on both sides of the eardrum.

The process of hearing can be summarized by stating that sound waves in the form of vibrations arrive through the external auditory canal, strike the eardrum and set it in motion. This motion starts the chain of ossicles in the middle ear and eventually the nerve fibers of the inner ear vibrating. This, in turn, stimulates the nerves which carry the nerve impulses to the auditory center of the brain for interpretation.

Simplified Sketch Of The Human Ear³



³Adapted from *The Ear and How it Works*, by Francis Lederer, M.D.,
A reprint from *If You Have a Deaf Child* Published by University of Illinois
Press, Urbana, Illinois.

CLASSIFICATIONS OF DEAFNESS

The causes of deafness are not always known. They may be grouped into two broad classifications, congenital and acquired.

Congenital deafness may be due to heredity, a defect in genes, and damage to the embryo during pregnancy. The embryo may be subjected to many invasions including those which cause impairment of hearing. German measles (rubella) during the first three months of pregnancy may produce singly, or in combination, such anomalies as deafness, blindness, cleft palate, cerebral palsy and mental deficiency. Other viral infections may have harmful effects on the embryo.

Acquired (adventitious) deafness may occur at any time after birth. The cause may be disease such as measles, mumps, scarlet fever, diphtheria, whooping cough, influenza, meningitis, encephalitis and others. Usually perceptive type hearing losses result from these diseases. Infections such as otitis media may produce a conductive type of hearing loss. Trauma, intense noise and injury of any part of the hearing mechanism may result in hearing loss.

The normal process of growing old results in a natural deterioration of the sensory processes. Although not all old people have a noticeable hearing loss, with medical science extending the normal life span upward, statistics will probably show an increasing number of people with hearing loss. Beginning at the age of twenty to thirty the hearing acuity seems to diminish with each succeeding decade.

Occasionally, a child who had normal hearing for the first years of his life, loses his hearing. During the early years he learned to talk, acquired vocabulary and achieved language commensurate with that of any hearing child of comparable mental ability. After severe hearing loss is acquired, he is a deaf child with regard to his functional ability to use his hearing. He differs substantially, however, from the child who was born deaf or who lost his hearing during infancy. The instructional needs of the child who acquired deafness after the development of speech and language will be entirely different from those of the child born deaf or deafened during infancy.

The child who loses his hearing in late childhood or early adolescence has already acquired a vocabulary in speech and comprehends and uses language. Under these circumstances, he continues to understand and use language in his daily life. Such a child is a *deafened* child. He is not a hard of hearing child. The problems and needs of this child are different from those of a hard of hear-

ing child and from those who are congenitally deaf. The greatest need of the child is assistance in retaining the speech and language skills which he has already acquired. Lipreading skills must be developed. Great emphasis should be directed toward retaining correct patterns of speech which will deteriorate unless assistance is provided.

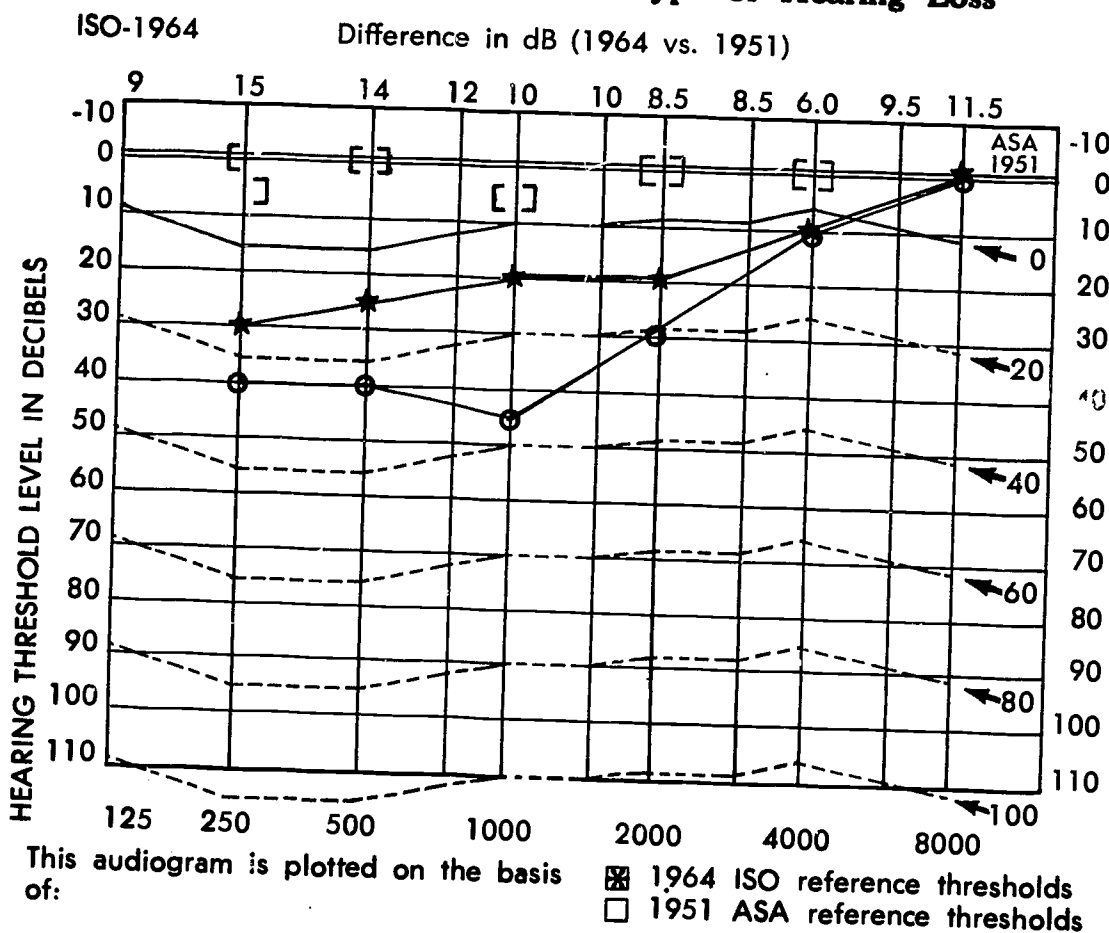
Types of Hearing Impairment

It is impossible to provide the most appropriate programs of instruction or determine the usefulness of hearing aids unless basic information concerning the following three types of hearing loss is understood.

1. Conductive Hearing Impairment:

In this type of hearing impairment, some conditions exist in the outer or middle ear so that the transmission of sound vibrations to the inner ear are either partially or totally obstructed. The inner ear hearing mechanisms are intact. Therefore, if sound vibrations can reach the inner ear, the person will be able to hear. Certain conditions causing this type of hearing loss are amenable to medical treatment or surgical procedures. If discovered in time, the prevention or correction of a serious hearing loss may be successfully accomplished.

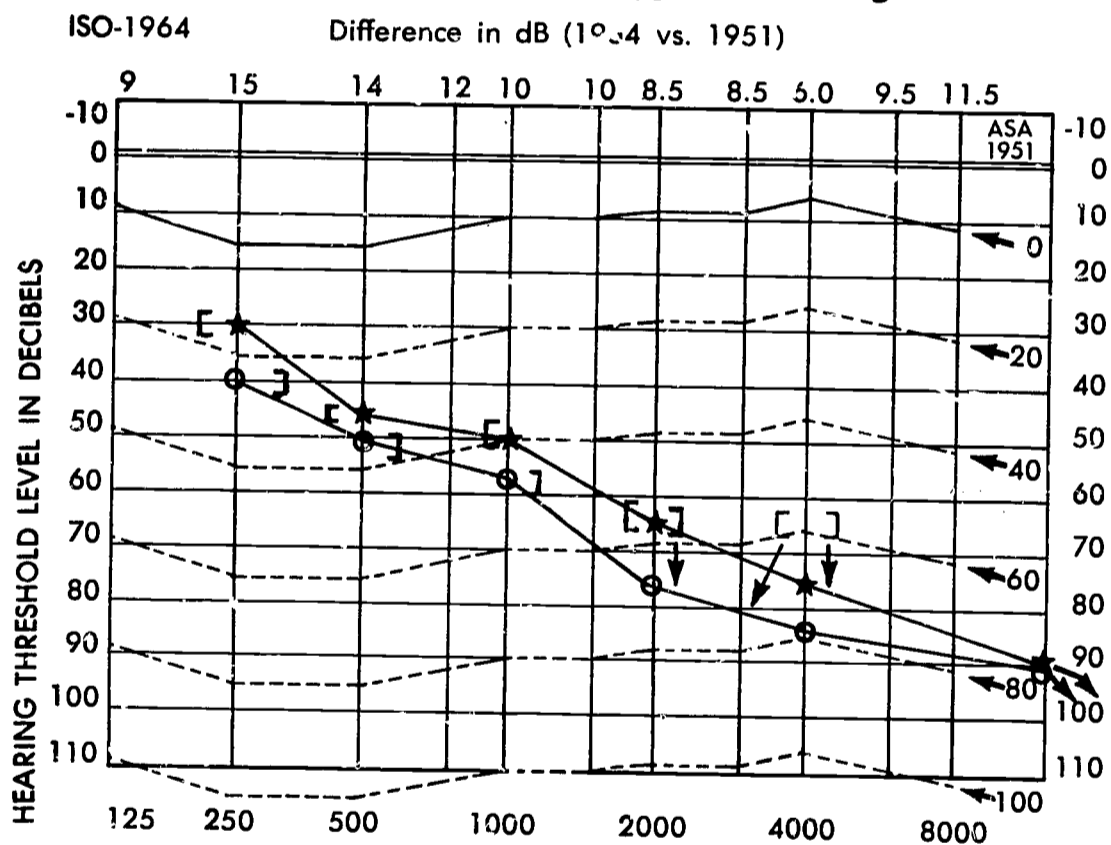
Audiogram Illustrating Conductive Type of Hearing Loss



2. Sensori-neural Hearing Impairment:

The difficulty in sensori-neural hearing impairment lies beyond the middle ear. The sensory structures in the inner ear, along the pathway of the auditory nerve or in the hearing center of the brain, are either impaired or have degenerated. The person so affected generally has difficulty hearing the high frequency sounds such as s, th, ch, f, etc. Once nerve structures are destroyed, they cannot be restored. Medical science can do little, if anything, for the person who has sustained a perceptible or sensori-neural hearing impairment. It necessarily follows that amplified sound provided by hearing aids will be of limited value to persons who have this type of hearing impairment.

Audiogram Illustrating Perceptive Type of Hearing Loss



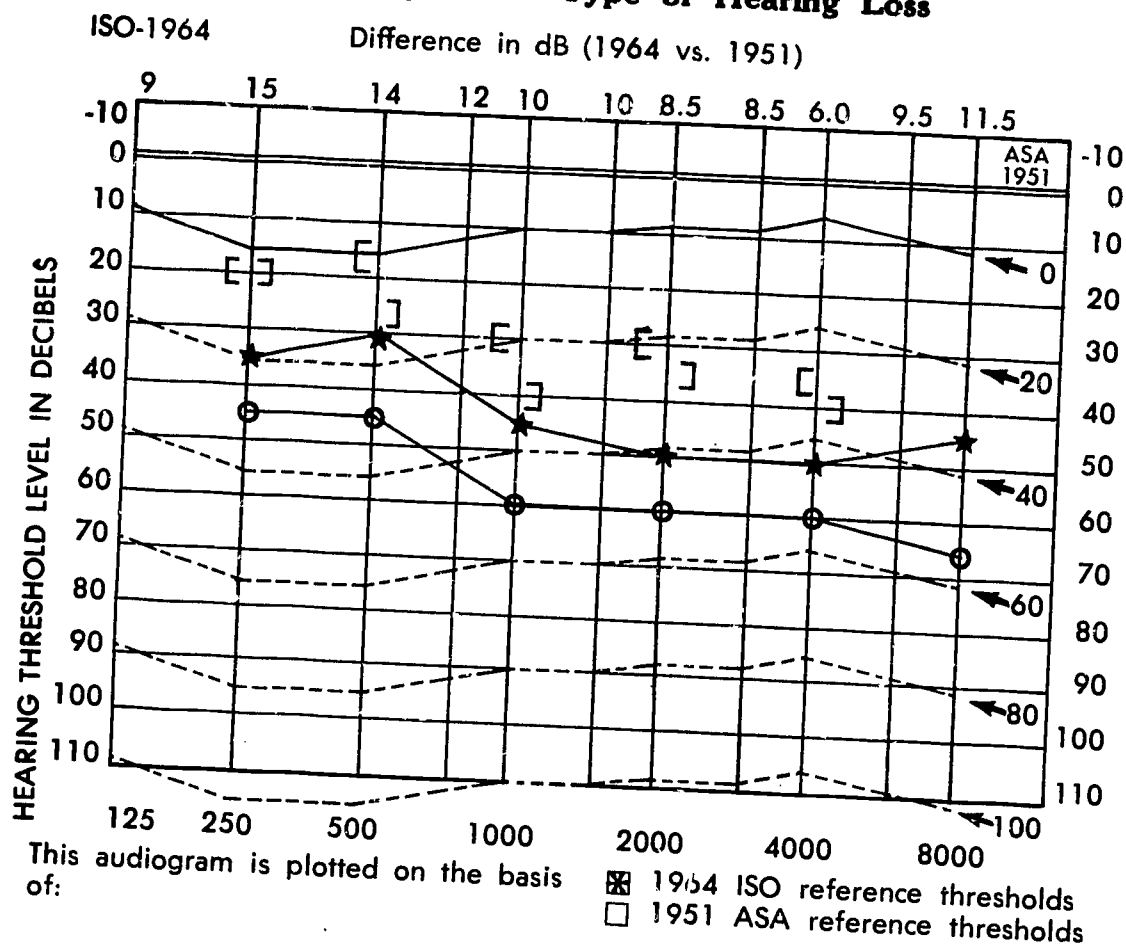
This audiogram is plotted on the basis of:
 of: [] 1964 ISO reference thresholds
 [] 1951 ASA reference thresholds

3. Mixed Hearing Impairment:

The previous paragraphs have dealt with "pure" conductive and "pure" sensori-neural type hearing losses. Actually, there are many instances where audiograms reveal both conductive and perceptible types of loss in varying

degrees. In these cases where both types of hearing loss are present it is referred to as a mixed hearing loss.

Audiogram Illustrating Mixed Type of Hearing Loss



Persons planning special education programs for children with hearing loss must have the following information available:

1. Type of deafness
2. Nature and degree of deafness (amount of hearing loss)
3. Cause of deafness (if known)
4. Age of onset of deafness
5. Speech threshold aided and unaided
6. Range of intelligence
7. How the child with his particular hearing loss functions with respect to speech, speechreading and language usage.

Persons classifying children for the purpose of instruction must recognize the difference between deaf and hard of hearing children and be able to identify the multi-handicapped child.

THE MULTI-HANDICAPPED DEAF CHILD

The Slow Learning Deaf Child

Some investigations indicate that there is a slightly larger per cent of deaf children reported in the slow learning range of ability than is true for any unselected group of hearing children. This might be attributed to the fact that the cause of the hearing loss might also have had some damaging effects upon the child's mental potential.

A deaf child's mental retardation may be obvious and indisputable. However, it behooves all persons responsible for educational programs for deaf children to delay judgment until children have had ample opportunity to show their real learning capacity. If in providing this opportunity the deaf child performs unsatisfactorily in learning and in teaching situations where most deaf children progress satisfactorily and repeated performance on psychological tests is low, some degree of retardation may be safely assumed.

At the present time in Ohio, all children whose intelligence quotients fall in the range of 50 and above are considered to be educable. The educable deaf child has never been adequately or clearly defined in terms of mental ability.

Deaf children who function in the low range of educability need a program of instruction geared to their ability. This program should be practical and experiential in nature. The need to help these children become as economically useful and independent as possible, socially adjusted and emotionally stable while being taught skills of communication is a big order. The need also exists in developing instructional programs for hard of hearing children who function in the slow learning range of ability.

The Deaf-Blind Child

The total number of deaf-blind children in the United States is comparatively small. According to the American Foundation for the Blind, in February 1965 there were 400 deaf-blind individuals in this country twenty years of age and under. There were seven residential schools with established departments for deaf-blind children. These were the Perkins Institution for the Blind in Watertown, Massachusetts; New York Institute for the Education of the Blind, New York 67, New York; Michigan School for the Blind, Lansing, Michigan; Washington State School for the Blind, Vancouver, Washington; the California School for the

Blind, Berkeley, California, the Illinois Braille and Sight Saving School, Jacksonville, Illinois, and the Alabama School for Deaf and Blind at Talladega, Alabama.

The deaf child depends heavily on vision in his learning experiences while the blind child depends primarily on hearing and touch. Vision and hearing are denied the deaf-blind child. Touch must be used as the chief avenue for learning experiences. The learning task of the deaf-blind is extremely difficult. Teaching the deaf-blind requires a great deal of general ability, extensive training in teacher education in both the education of the deaf and the blind, along with a background of skill in general teaching. No school district in Ohio maintains such a program for deaf-blind children. Since this is also true at the state level, deaf-blind children in Ohio are educated elsewhere at state expense. Two children from Ohio have been attending Perkins Institution for the Blind in Watertown Massachusetts since 1959 and one attended Alabama Institute for Deaf and Blind at Talladega, Alabama, during the 1964-65 school year. One more child is awaiting school placement.

The Deaf-Cerebral Palsied Child

Some children are handicapped with both deafness and cerebral palsy. When the cerebral palsy is mild, children may be enrolled in special classes for the deaf when they can adequately benefit from the programs offered. This decision should be made on an individual basis. Placement of these multi-handicapped children should never be at the expense of the other children in the class. If the addition of a cerebral palsied deaf child to a class would result in an appreciable reduction in the educational progress for the other deaf children in the class, it would appear that such enrollment would not be justifiable. Some deaf-cerebral palsied children are so physically involved that enrollment in a special day class or residential school is not practicable.

The educational needs of the deaf-cerebral palsied child are difficult to meet. Most of the school districts maintaining classes for the deaf are not equipped or staffed to provide the desired ancillary services. It seems apparent that there is a need to develop cooperative programs, where existing facilities and staff of both special areas might provide a specific program for educable deaf children who are severely handicapped with cerebral palsy.

THE APHASIC CHILD

Aphasia is a communicative disorder. The term implies the loss or lack of an individual's ability to express and/or interpret oral and written language. The manifestation often makes the individual appear to be deaf. The area of this disorder is not located in the end organ of hearing or the structures needed to produce speech but in some part of the brain or central nervous system. For many years, aphasic children have been enrolled in special classes for the deaf. It is not uncommon to find them in classes for the deaf today. Aphasic children and deaf children often appear to have common developmental or functional deficiencies. The aphasic child often appears not to hear and usually does not learn to talk. Consequently, educators, administrators, nurses and other school personnel have concluded that the child's problem was deafness and recommended placement in special classes for the deaf.

The educational needs of the accurately diagnosed aphasic child appear to be very different from those of a deaf child. For this reason all persons working with deaf children need to be informed regarding aphasia. The small number of truly aphasic children in most school districts adds to the problems in attempting to provide a suitable program for them. It has been suggested that the educational needs of this group of children might be most readily provided on a regional or state-wide basis.

GROUP AND INDIVIDUAL HEARING AIDS

Every child with a hearing impairment, regardless of how limited the hearing might be, should be trained and afforded the opportunity to use the hearing he has to the fullest extent. A specific length of time should never be set for this trial. Continued auditory training which may appear to be laborious, time consuming and unrewarding should never be neglected in the daily program for deaf children.

It is most important that teachers and parents understand the value as well as the limitations and expectations which are reasonable goals relative to the use of residual hearing for the child who is a candidate for, or a wearer of an individual aid. Frequently pressure is exerted upon parents to purchase hearing aids for their children when there is little opportunity to know how much the child can benefit from the use of an aid, and where no opportunity for immediate training exists. Too often people conclude that all hearing handicapped persons can hear perfectly if they wear hearing aids. Seeing an aid being worn is usually an indication for people to speak louder, more slowly, and to exaggerate speech and lip movements in attempting to make speech more intelligible to the person wearing the aid. In reality, the speaker is doing a disservice to the listener. The exaggerations in speech production distort the speechreading clues and the raised voice added to the amplification provided by the aid may well cause physical discomfort. The real function of a hearing aid is to amplify and direct sound over the existing auditory pathway.

The type and degree of hearing loss must be a prime consideration in determining the value which the wearer derives from the use of amplification. The child with some residual hearing usually can benefit from wearing a hearing aid, especially after training. If the child has considerable residual hearing, he should benefit substantially from a hearing aid. If the child has a profound hearing loss, the expectations for benefit must be adjusted accordingly. He may never hear and understand speech, but may be able to use the hearing aid to locate sound, to monitor the intensity of his own speech, to be alerted to look at speakers for speechreading clues and to receive accent and rhythm clues necessary in his own speech development.

Hearing aids are of most value to those who have conductive hearing losses. Persons who have pure sensori-neural (perceptive) hearing losses in which the inner ear or the central nervous system is affected will profit much less from the use of hearing aids. Chil-

dren whose audiometric contour shows a precipitous drop through the speech range from normal or near normal hearing to a severe loss suffer from a severe discrimination or clarity problem. Amplifying sound may cause discomfort and increase the already existing discrimination problems in such cases by adding distortion.

Hearing aids are used in every good oral program of instruction for deaf children. Research has proven that lipreading skills increase appreciably when children can use visual and auditory modalities simultaneously. Amplification alone is not sufficient, however. Consistent, intensive daily instruction using a planned auditory training program is required to accomplish the educational benefits from an aural-oral approach.

Principles of Amplification

Sound waves are picked up by the microphone of a hearing aid where they are changed into electrical impulses. These are sent to the amplifier where the weak impulses are made louder or stronger. When this has been accomplished, the sound waves are sent on to the receiver. The receiver changes the amplified electrical sound impulses back into the original but stronger sound waves. These amplified sounds are eventually delivered to the inner ear where the sound is analyzed. Nerve impulses are then sent to the brain for interpretation, resulting in hearing.

Types of Hearing Aids

1. Individual Hearing Aids

Individual hearing aids are the most common type of aid in use at present. These are wearable, and vary considerably in size and weight, according to the manufacturer and specifications under which they are made. They are designed for individual use and should be selected on the basis of individual needs as dictated by the wearer's type and degree of hearing loss and other pertinent factors.

The earmold attached to the receiver of most individual aids is worn in the ear canal. When the sound is directed from the external ear canal into the middle ear and on into the inner ear, the hearing aid is of the *air conduction* type. Although children are frequently fitted with one aid, many children have been fitted with either a "Y" cord arrangement (one amplifier and microphone with a receiver and earmold fitted to each ear) or true binaural hearing aids (two separate aids worn on opposite sides of the head or body).

Some people are unable to wear air conduction hearing aids for etiological reasons but can be fitted with an aid in which the oscillator (bone conduction receiver) is worn on the bone behind the ear. In such cases, the amplified sound by-passes the middle ear and is directed through the bony structures in the skull directly to the inner ear. An aid employing these principles is known as a *bone conduction* hearing aid.

There appears to be a need to teach and encourage deaf children to seek more appropriate ways to wear individual aids. Many times the aid is buried under several layers of clothing or in a position where the microphone is facing the body rather than toward the source of environmental sounds. The hearing aid carrier itself may fit improperly so that the hearing aid is not in a position to advantageously receive sound waves. All deaf children and their parents, as well as teachers, need to understand the simple principles involved in the care and maintenance of hearing aids whether they are group or individual ones.

Most authorities prefer to have individual hearing aids fitted only after children have had instruction and amplification using a group aid or a desk model aid. Others feel that the earlier children are fitted with amplification, the better.

2. Group Hearing Aids.

Group hearing aids operate on the same basic principle as outlined above for individual hearing aids. This type of hearing aid has been built to make it possible for several people to receive the same amplified sound at one time. The amplifier is large and designed to provide greater power and fidelity than that usually available from individual wearable aids. Provision is made for the use of microphones, a record player, a tape recorder, the audio from television or sound movie projector as a controlled sound source. Headphones are commonly used as receivers. In the most recent years, some group aids have provision for the use of insert earmolds in conjunction with hearing aid type receivers. In either case, the child may control the volume of the amplified sound he is receiving in each ear individually. The amplification needs of each ear of each member of the group can thus be satisfied by adjusting the individual volume controls. Standards for the approval of special education units specify that each classroom for the deaf in public day schools in Ohio should be equipped with a group hearing aid and enough headphones or receivers for each member of the class.

Selection of Hearing Aids

The selection and fitting of hearing aids present a number of problems to all engaged in this operation. This type of service is frequently not available in a community. One must investigate the facilities offering hearing aid evaluations. All clinics or centers do not provide the same type of service, due to limited financial support and shortage of trained personnel. The service may be provided by a local chapter of the American Hearing Society. In some communities a college or a university may have departments which provide the service. Some communities provide this service through private foundations or a community United Appeal agency. Regardless of where the service is provided, the advice and recommendations for obtaining and wearing a hearing aid should come from an otologist *and* an audiologist.

Anyone interested in purchasing a hearing aid should make certain that the evaluation service is provided by a staff adequately and appropriately trained and experienced in hearing testing and hearing aid evaluation, and can provide unbiased recommendations for the selection of an aid on the basis of test findings. This agency should also be able to provide counseling services and follow-up instructional therapy as needed.

PARENT EDUCATION

The education of deaf children is such an encompassing program that parents and educators must work cooperatively. Many parents are unaware of existing hearing losses in their children. Unlike blindness or orthopedic handicaps, deafness is not readily identifiable or easily discernible to parents or other people during the child's infancy. Usually parents do realize that something is wrong and become concerned when the child fails to develop speech at the age at which children normally begin to talk. They begin to realize that he does not respond to sounds, yet are confused when they recall that he gave responses to tactile stimuli which were interpreted as responses resulting from hearing. They appreciate the lack of social and emotional growth but attribute these to the child being "slow." On occasion, they have been led to believe that what they have observed is nothing to be alarmed about and that "this is something the child will outgrow and be all right."

Sometimes parents who have been told by medical authorities that their child is deaf have failed to accept the fact. They have traveled from clinic to clinic and from physician to physician for examinations always hoping to hear that which they *want* to hear.

As they travel from one office to another each stop adds to their confusion. They want to accept the problem but actually hold to a hope that the condition will be amenable to medical treatment or that through some procedure the deafness can be remedied. Most cases of severe deafness are not amenable to any type of correction. Parents often fail to realize this or refuse to accept it. Taking a child from one specialist to another tends to disturb him and causes great expense to the parent. Of even greater importance, it delays the day when the child's formal educational program is initiated.

Parents' natural and often unconscious feeling of rejection toward deafness may lead them to pursue a great variety of activities for their child to try to restore the hearing function. Some of these include flights at high altitudes, the removal of tonsils and adenoids, use of radium, the new surgical procedures of fenestration, mobilization of stapes or stapedectomy, blowing smoke into the child's ears, the manipulation of bones of the skull, particularly in the region behind the ear and other practices. In some cases, the use of radium has proven beneficial where adenoidal tissue has become greatly enlarged in the nasopharynx. According to medical authorities only selected cases are amenable to surgical procedures. It is unfortunate that parents do not realize that all deaf children

are not potential candidates for surgery. They should be encouraged to accept the specialist's diagnosis. Many popular magazines publicize dramatic instances of improvement in hearing through surgery or the use of a hearing aid. Consequently, parents grope at every faint ray of hope for a "cure" for their child's deafness.

The deafness of a child comes to parents as an initial shock which may prove to be quite traumatic. If the cause of deafness is unknown, parents may have feelings of guilt for themselves or of blame toward each other for the deafness. In most cases of hearing impairment establishing cause or attaching a diagnostic label does not in itself correct the existing impairment nor alleviate the physical, educational, social or emotional problems associated with it.

The child's environment will be more complicated if an unwholesome atmosphere is generated by parents' unwillingness to accept the child and his problems. Parents should be counselled and guided to accept the situation as it exists by people trained in the area of special education. Relatives and friends should be encouraged to accept the fact of deafness. The home should be a place that fosters good relationships and good training. Parents should strive to investigate the educational opportunities available and seek the best possible educational program for their children.

The attitudes of all parents toward their children are of utmost importance but in the case of children who have hearing impairments, these attitudes are even more important. They are revealed not only through *what* is said and *how* it is said but also in one's appearance, what he does and how he does it. Parents should be aware that the deaf child relies heavily upon the visible reflections of attitudes of those in his immediate environment. They interpret parent attitudes and feelings which are expressed through acceptance, over protection or rejection. Parents who reflect over-protective attitudes discourage their children from becoming independent, self-reliant, responsible persons. They discourage children from participating in neighborhood activities because of anxiety over the competition and fear for their physical welfare. Such parents are losing sight of the opportunity for stimulating experiences in the child's world.

Parents who understand deafness accept the child as he is and try to help him solve his problems. They encourage him to participate in life activities but they recognize that there are specific things that he will not be able to do. They must recognize that physical and motor development is more like than unlike hearing children and that he can do most of the things that require these

skills. It is reasonable to expect the deaf child to do all those things that other children do which are not dependent upon hearing. Routine in living and provision for the child to accept certain responsibilities should be encouraged and expected in the home. This provides the child with the necessary feeling of security and of "belonging".

Some parents provide for the physical needs of their deaf children but at the same time cannot show much affection or give them much attention. There have been numerous cases where parents express and demonstrate resentment for the deaf child and are most anxious for a school to assume all responsibility for their child. They are creating an atmosphere in which the child cannot make the growth of which he is capable. If parents tend to reject their deaf child, it is important that they be helped in understanding themselves so that the welfare and happiness of the family can be maintained and each member of the family be recognized for his worth.

Parents should understand the limitations of deafness in children and youth. They should accept realistic goals so the child does not become insecure, frustrated, or unhappy. It is true that all deaf children have special needs, and parents should help provide ways to meet these needs.

In families having both hearing children and deaf children in the home, the parents must make sure that the hearing children are not relegated the role of second place in the family. Deafness does make it necessary to provide children considerable extra attention, in time, effort and energy. There is a real need for affection and companionship. Nevertheless, the responsibility for a deaf child should be shared by the entire family. It is unfair for the mother to assume the complete responsibility. Both of the parents, as well as siblings, should bear their share. At no time should a deaf child be permitted to monopolize experiences, situations or infringe upon the rights and the privileges of the other members of his family.

Parents should understand how hearing loss affects the child's development and growth. The hearing child acquires speech, vocabulary and knowledge and use of language through his hearing. If we could estimate the vocabulary of a child of normal mental ability when he starts to school, it would be safe to say he could use two or three thousand words meaningfully. He acquired them in an effortless way. These provide him with a means for social, emotional and educational growth. He understands many more words

than he uses so he has a large number of words in reserve. The use of speech and language makes it possible for him to make rationalizations and deductions.

The deaf child, in contrast, does not naturally acquire speech, has no reserve supply of words and meanings and, until he is taught to speak, does not know that words exist. He cannot understand other people. He gestures, cries, screams, squeals, points, shakes his head and uses vocalizations which are not understood by hearing people.

Deaf children have the same basic needs as hearing children. They need the competition afforded by the peer group and also the companionship and encouragement that they give. The deaf child will learn and develop his potentiality if learning experiences are provided through purposeful activities. In any instance, he needs both individual and group activities.

There is a great need for guidance, parent counselling and training of parents of preschool deaf children. This should be the responsibility of educators. Parents need training early to help the child develop socially and emotionally. They need to understand the child; to know how to talk to him; how to discipline him; and above all, they need encouragement and guidance in preparing the child for school experience. They need to know that the school and teacher will provide the special technique of teaching communication skills, but that the parents and home must provide the opportunities for enriching and reinforcing the special instruction received at school.

Parents should be encouraged to provide a blackboard in the home for use of both the deaf child and other members of the family. This is a very desirable way to reinforce communication skills. It will provide the child opportunity to draw, write or illustrate language for which he has no words and thus help to reduce his communication frustrations.

Understanding the findings of the otologist and the audiologist as they relate to the nature and degree of the child's hearing loss is imperative for parents. They need to understand how this will affect the child's acquisition of speech. They need to understand why the child needs periodic hearing evaluation. They should be counselled with regard to the findings after every evaluation.

Parents should understand the basic principles of a hearing aid. If the child wears an individual aid, parents should understand how to take care of the instrument. They should be taught how to check the operation of the aid for the child. They should

be encouraged to see that the aid is operating effectively and assume responsibility for its maintenance. They should be encouraged to provide a suitable carrier or harness and shown how it can be worn correctly, preferably on the outside of the child's clothing. They should be advised about community assistance which might be available to them, if they are financially unable to obtain a recommended aid or to provide the necessary cost of the maintenance of one.

When a handicap in addition to a hearing deficit exists, parents should be counselled correspondingly with complete honesty. This is especially true of children who have a hearing loss and limited mental ability. Many times parents consider only the deafness, instead of the child. Due to this all school failure or success may be rationalized or justified in terms of the inability to hear. In a like manner, lack of social acceptance or emotional instability are thought to be the result of the hearing loss. Educators must assume the responsibility of interpreting to parents the school progress in terms of the child's ability. In conferences with school personnel, parents should not only be informed about the child's present progress but also concerning long range academic and vocational plans. The home and school need to have a common goal toward which to strive. Occasionally parents set unrealistic goals for deaf children which appear to be beyond all limits of realization even for normal children.

Above all, parents must realize the child's success in any program of education is directly related to a rather large composite of factors, among which are the child's physical, mental, social and emotional growth and development in addition to the hearing loss and the age of onset.

PART III

EDUCATIONAL ISSUES

In April, 1965, a three day Work Conference was held in Granville, Ohio. The Ohio Department of Health in cooperation with the Division of Special Education sponsored this invitational conference. Participants included representatives from health, welfare, community agencies, universities and education. This conference was arranged to discuss trends and implications for future programs related to special education for hearing impaired children.

In discussing programs with educators during recent years, particularly at the Granville Work Conference, the following has emerged as an outline of issues which will demand attention and direction if these children are to realize their potential academically, and vocationally and are to make the best possible adjustment socially and emotionally.

A. POPULATION

1. Early recognition of a hearing impairment
2. Establishment of a central registry of preschool hearing impaired children
3. Provision for parent education programs throughout the state
4. Compilation of evaluative criteria for use in placement, transfer and dismissal of children from special classes
5. Establishment of a central diagnostic clinic where services of trained, experienced, competent staff provide opportunities for diagnostic teaching on a residential basis when necessary following the initial evaluation and prior to placement of children in suitable programs of education
6. Provision for special education classes for multi-handicapped hearing impaired children
7. Inauguration of continuing programs expressly organized *per se* for slow learning hearing impaired children (Longitudinal experience with such programs should assist in determining the mental ability ranges required to learn sufficient speech and language to meet adequately the persistent life problems and to become self-sufficient individuals in society.)
8. Determination of who is responsible for the so-called "language disturbed child", what a curriculum for these children should include and what teacher competencies should be required for working with this population

B. PROGRAM—INSTRUCTION

1. Provision of educational opportunities for hearing impaired children in central facilities at all levels of instruction from preschool through secondary schools (This facility should be located in or near an existing facility for hearing children.)
2. Periodic evaluation of present standards for approval of special education units
3. Consideration of the existing standards as being minimal
4. Determination of the most compatible class size and age range for instruction through the establishment of project and research units
5. Provisions for workshops and institutes devoted to the task of preparing curriculum guides and/or outlines in the skill areas of speech, language, speechreading and auditory training
6. Development of fundamental concept outlines for the subject matter areas of science, social studies, mathematics, vocational and occupational education by workshop participants
7. Maintenance of a sufficient number of classes within each program to permit grouping and re-grouping of children for instructional purposes
8. Determination through research techniques of the recommended minimum and maximum number of pupils per class as related to the specific program of instruction, the nature and degree of hearing impairment, the ability and the level of instruction

C. PERSONNEL AND STAFF

1. Recruitment by school districts of teachers for employment who are well trained, qualified and competent as both experts in instruction and experimenters in classroom methods and techniques
2. Provision of more and better supervision in centers where a special program is maintained (The responsibilities of supervisors who must be well trained and have teaching experience should be in directing, developing and re-evaluating existing instructional programs and curriculum guides; improving or devising guidelines for placement of children in classes, transfer, promotion and integration of hearing impaired children into classes with hearing children, dismissal, and referral of children for vocational training, work-training and sheltered workshops.)

3. School districts maintaining programs should be able to offer supportive services of the following either as full-time, part-time staff members or on a contract basis:
 - a. Audiologist
 - b. School Psychologist
 - c. Medical Examination and Consultation Services:
 - 1) Otologist
 - 2) Pediatrician
 - 3) Ophthalmogist
 - 4) Psychiatrist
 - 5) Dentist
 - d. Other Personnel
 - 1) Occupational Therapist
 - 2) Physical Therapist
 - 3) Vocational Counsellors
 - 4) Work-Training Consultants
 - 5) Secretarial Staff
 - 6) Audio-visual Specialist
 - 7) Electronic Technician
4. Encouragement of in-service training for staff on a local, regional or state basis in workshops, institutes, demonstration projects, diagnostic classes or research projects involving innovative practices in related areas of instruction and specialization
5. Improvement of cooperation between local supervisors of special education and university staff engaged in the training of teachers for hearing impaired children, specifically in providing supervised classroom observation and practice teaching

D. RESEARCH AND DEMONSTRATION PROJECTS

1. Reduction of the time lag between the discovery of research findings from many disciplines related to the education of the deaf and the implementation of this into training programs (Perhaps this lag could be reduced if procedures could be established for screening out for trial and dissemination that research which has the most practical application.)
2. Establishment of a committee whose members have demonstrated competence in scientific research and whose responsibilities would include the following:
 - a. Review the literature
 - b. Select research for demonstration

- c. Field test selected research and evaluate the results
 - d. Disseminate the findings
3. Inauguration of demonstration projects which are related to the total program of education for hearing impaired children and youth

The past has given hearing impaired children a rich heritage. The stages of growth and development of educational programs have been fruitful and have been characterized by significant changes. Whatever the future holds for the hearing impaired children of tomorrow actually will depend on what we do today. Although the preceding sections attempt to represent the stage and actors as they seem to appear in 1966, this will hopefully not be their static role in years to come. The scenery, the setting, the actors must, of necessity, be altered if they keep pace with the ever-changing world with its medical, sociological, technological, scientific, industrial and educational advances.

PART IV

**APPENDIX A
PROGRAM AND
CERTIFICATION STANDARDS**

STATE BOARD OF EDUCATION PROGRAM STANDARDS

Adopted April 1960

Revised July 1962

2.0 Units for Deaf Children

2.1 General

- 2.11 A special education unit or fractional unit for deaf children may be approved only within these standards.
- 2.12 A special education unit or fractional unit may be approved for an experimental or research unit designed to provide a new or different approach to educational techniques and/or methodology related to deaf children.
- 2.13 All children enrolled in an approved unit shall meet the standards listed herein.
- 2.14 A special education unit for supervision of a program for deaf children may be approved where there are ten or more approved units.

2.2 Eligibility

- 2.21 Any educable child, age three or over, with a hearing impairment ranging from moderate through severe in the speech range (60 decibels or more in the better ear), shall be eligible for placement in a special unit for the deaf. The impairment may date before the age at which speech is normally acquired and/or the age when language is learned in the ordinary ways of normal hearing children.
- 2.22 Determination of eligibility shall be in terms of physical, mental, social and emotional readiness on the basis of the complete findings of the otologist, audiologist and school psychologist.
- 2.23 Children placed in classes for the deaf should be re-evaluated each year. The otological, audiological, psychological, achievement and reading test findings should be reviewed and the child placed in the educational program on the basis of these.

2.3 Assignment

2.31 The superintendent of the school district is legally responsible for the assignment of pupils to a special class. He may appoint one individual in a school district to assume responsibility for assigning children to a special class.

2.32 Recommendations for admission and dismissal from a unit shall be determined by a conference of and/or reports from qualified professional people who should consider cause, type, degree of impairment and age at onset, mental maturity, social adequacy and the educational needs of the child.

2.4 Class Size and Age Range

2.41 The enrollment of preschool age deaf children in a unit on a half-day basis shall be a minimum of six and a maximum of eight.

2.42 In primary and intermediate units the minimum enrollment shall be six and a maximum of eight.

2.43 In junior high and senior high school units the minimum enrollment shall be six and the maximum ten pupils.

2.44 The maximum number of pupils that may be enrolled should be determined on chronological age range and/or achievement level.

2.45 The age range and/or the achievement level should not represent more than four years.

2.5 Housing

2.51 Classes for the deaf should be housed in regular school buildings in which corresponding age children are housed or a special public school.

2.52 Adequate housing should take into consideration the age of the children.

2.53 Classrooms should be large enough to provide accommodations for special equipment and teaching materials used in instruction.

2.6 Equipment and Materials

2.61 Classrooms for the deaf should be provided with desks, tables, chairs and other equipment similar to that found in classrooms for hearing children of comparable age.

2.62 Each classroom should be equipped with a group hearing aid and enough head phones for each member of the class. Arrangements shall be made to keep them in good repair.

2.63 A record player and suitable records should be available for use.

2.64 A large mirror should be available for use during speech periods.

2.7 Program

2.71 The educational program should attempt to meet the needs of the deaf child by providing basic skills in lip reading, speech, language development, auditory training and reading in order to prepare the child for subject matter content which he will be expected to master.

2.72 When consideration is to be given for the deaf child's assignment for any part of the day in a class with hearing children, the person in charge of the program locally shall consult with the principal of the building, the classroom teacher to whom the child is to be assigned, and the teacher of the deaf. This will help to insure the child's ability to achieve in the class and to unify the thinking of all who are responsible for preparing a child to take his place in the society in which he lives.

2.8 Curriculum

2.81 The curriculum adopted for hearing children in the district maintaining classes for the deaf should be used with deaf children insofar as it meets their educational needs.

2.82 Teachers of the deaf should make adjustments in the established curriculum as are needed to meet the group and individual requirements of the children in the class being taught.

2.83 Teachers of the deaf should follow outlines and/or special courses of study for the deaf in their daily program planning.

2.9 Teacher Qualifications

2.91 A teacher shall meet all the requirements for certification as set by the State Board of Education for this area of specialization.

**Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio**

CERTIFICATION LAWS AND REGULATIONS **

Teachers of Deaf Children

A. An applicant for the provisional special certificate to teach deaf children, who does not qualify for a provisional teaching certificate, shall submit evidence of the following preparation (included within or in excess of the requirement for a bachelor's degree) from a college or university approved to prepare teachers of the deaf and/or an approved school for the deaf which is affiliated with a college or university.

- (1) The Teaching of Speech to the Deaf 4 sem. hrs.
- (2) The Teaching of Language to the Deaf 4 sem. hrs.
- (3) Methods of Teaching Elementary Subjects
to the Deaf 4 sem. hrs.
- (4) Problems in Education and Guidance of
the Deaf 2 sem. hrs.
- (5) Anatomy of Auditory and Speech
Mechanisms 2 sem. hrs.
- (6) Audiometry and Hearing Aids 2 sem. hrs.
- (7) Auditory Training 2 sem. hrs.
- (8) Methods of Teaching Speechreading 2 sem. hrs.
- (9) Psychology or Education of Exceptional
Children 2 sem. hrs.
- (10) Observation and Student Teaching in
Classes for Deaf Children 6 sem. hrs.

** Adopted by State Board of Education December 11, 1961. Effective January 1, 1963.

B. An applicant for the provisional special certificate to teach deaf children, who holds a standard elementary, secondary or special certificate, shall submit evidence of the following preparation from a college or university approved to prepare teachers of the deaf and/or an approved school for the deaf which is affiliated with a college or university.

- (1) The Teaching of Speech to the Deaf 4 sem. hrs.
- (2) The Teaching of Language to the Deaf 4 sem. hrs.
- (3) Audiometry and Hearing Aids 2 sem. hrs.

- (4) Auditory Training 2 sem. hrs.
- (5) Methods of Teaching Speechreading 2 sem. hrs.
- (6) Methods of Teaching Elementary School
Subjects to the Deaf 4 sem. hrs.
- (7) Psychology or Education of Exceptional
Children 2 sem. hrs.
- (8) Observation and Student Teaching in Classes
for Deaf Children* 6 sem. hrs.

* May be waived upon the completion of twenty-seven (27) months of successful teaching experience under supervision with deaf children.

**Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio**

ADMINISTRATIVE CRITERIA

**APPROVAL OF TEACHERS IN SPECIAL EDUCATION
UNITS FOR DEAF CHILDREN EFFECTIVE 1963-64
State Board of Education Program Standards—SE 2.0**

- A. Teachers currently in service will be approved if they:
1. Hold certification for teaching deaf children as prescribed in Certification Standards adopted December 1961.
 2. Hold a standard elementary, secondary or special teaching certificate validated for teaching the deaf as provided for under certification procedures prior to 1961.
 3. Hold a valid teaching certificate and submit a statement of intention to complete the certification requirements within a five-year period. This shall include all teachers, irrespective of years of service; and teachers so approved shall submit evidence of preparation status annually until the requirements have been completed.
 4. Hold a Life Certificate issued prior to September 5, 1935.
- B. Teachers new to the program will be approved if they:
1. Hold certification for teaching deaf children as prescribed in Certification Standards adopted December 1961.
 2. Hold a standard elementary, secondary or special certificate validated to teach the deaf as provided for under certification procedures prior to 1961.
 3. Hold a valid teaching certificate and submit evidence of completing prescribed certification to teach the deaf within five years of assignment to the special class for deaf children. Teachers approved under this agreement shall submit evidence of preparation status annually until all certification requirements are met.
- C. Emergency Situations:
1. A teacher in service prior to September 1963 who meets with an emergency which prevents him or her from completing the certification requirements may have the time limits extended for one year.

2. In case of a vacancy due to an emergency, a teacher who holds a valid teaching certificate may be approved for the current school year. A teacher so approved shall submit evidence of preparation status annually until the certification pattern is completed.

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio

TEACHER QUALIFICATIONS—SPECIAL EDUCATION
UNITS FOR DEAF CHILDREN

Section 2.0 State Board of Education Standards

Name of Teacher

School District

According to our records the above teacher has reported the following qualifications:

- 1. Teacher holds the special certificate to teach deaf children.
- 2. Teacher holds a standard elementary, secondary or special certificate validated for teaching deaf children.
- 3. Teacher holds a Life Certificate issued prior to September 5, 1935.

If number 1, 2, or 3 is checked *it will be necessary that we have a copy of the actual teaching certificate.*

- 4. Teacher is not certificated to teach deaf children as prescribed in Ohio Certification Standards effective September 1963.
 - a. Teacher has filed a letter of intent to complete training as prescribed in Administrative Criteria, effective September 1963.

Date of Letter

If number 4 is checked this teacher must complete training by September

It will then be necessary for you to submit a copy of the certificate.

Please return one copy of Form 2.9B as soon as possible.
The above information is accurate or has been corrected accordingly.

.....
Superintendent or Designated Representative

Date

STATE BOARD OF EDUCATION PROGRAM STANDARDS

Adopted April 1960

*Revised July 1962

3.0 Units for Hard of Hearing Children

3.1 General

- 3.11 A special education unit or fractional unit for hard of hearing children may be approved only within these standards.
- 3.12 A special education unit or fractional unit may be approved for an experimental or research unit designed to provide a new or different approach to educational techniques and/or methodology related to hard of hearing children.
- 3.13 All children enrolled in an approved unit shall meet the standards listed herein.

3.2 Eligibility

- 3.21 Any educable child of school age with a hearing impairment, ranging from mild to moderate in the speech range (40 decibel loss or more in the better ear), shall be eligible for placement in a unit for the hard of hearing. The sense of hearing though defective, is functional with or without a hearing aid. The criteria of degree of loss is important but should not supersede the consideration of the child's ability to use speech and language.
- 3.22 The selection of any child for a class for the hard of hearing shall be determined upon the basis of physical, mental, social and emotional readiness after complete reports from the otologist, audiologist, and school psychologist are available.
- 3.23 Children placed in classes for the hard of hearing should be re-evaluated each year.

3.3 Assignment

- 3.31 The superintendent of the school is legally responsible for the assignment of pupils to a special class. He may appoint one individual in a school district to assume the responsibility for the child's assignment. The person so designated should do the fol-

low-up to make certain the child's educational needs are being met.

- 3.32 Recommendation for admission and dismissal from a unit shall be determined by a conference of and/or reports from qualified professional people who should consider cause, type, degree of impairment and age at onset, the child's ability to use speech and language and other educational needs.

3.4 Class Size and Age Range

- 3.41 Classes shall enroll a minimum of ten and not exceed a maximum of twenty pupils.
- 3.42 Enrollments should be determined upon chronological age and/or grade level.
- 3.43 The age and/or grade range should represent not more than four years.

3.5 Housing

- 3.51 Classes for the hard of hearing shall be housed in regular public school buildings.
- 3.52 Classrooms should meet all the requirements for classrooms housing physically normal children of the same age.

3.6 Equipment and Materials

- 3.61 Every classroom for hard of hearing children should be equipped with a group hearing aid with a sufficient number of head phones to serve the class. Arrangements shall be made to keep this instrument in repair.
- 3.62 Record player and records for auditory training should be available for use.
- 3.63 A large mirror should be available for use during speech periods.

3.7 Program

- 3.71 The educational program for hard of hearing children shall be that provided for children of comparable age and ability. In addition to their basic program these children need to learn special skills to compensate for their hearing impairment.
- 3.72 When consideration is to be given for the hard of hearing child's assignment for any part of the day

in a class with hearing children, the person in charge of the program locally shall consult with the principal of the building, the classroom teacher to whom the child is to be assigned, and the teacher of the hard of hearing.

3.8 Curriculum

3.81 The curriculum for hard of hearing children shall be the same as that required of other children of comparable age and/or grade level.

3.82 Curriculum for hard of hearing children shall include

3.821 Auditory training

3.822 Lip reading

3.823 Speech correction and/or improvement

3.824 Language development

3.9 Teacher Qualifications

3.91 A teacher shall meet all the requirements for certification as set by the State Board of Education for this area of specialization.

**Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio**

CERTIFICATION LAWS AND REGULATIONS **

Teachers of Hard of Hearing Children

A. An applicant for the provisional special certificate to teach hard of hearing children shall submit evidence of the completion of the current requirements for the provisional certificate at the level for which the special certificate is requested and evidence of the following preparation in a college or university approved to train teachers of hard of hearing.

- (1) The Teaching of Speech to the Deaf 4 sem. hrs.
- (2) The Teaching of Language to the Deaf 4 sem. hrs.
- (3) Methods of Teaching Speechreading 2 sem. hrs.
- (4) Audiometry and Hearing Aids 2 sem. hrs.
- (5) Auditory Training 2 sem. hrs.
- (6) Psychology or Education of Exceptional
Children 2 sem. hrs.
- (7) Observation and Student Teaching in
Classes for Deaf or Hard of Hearing
Children* 6 sem. hrs.

*May be waived upon the completion of twenty-seven (27) months of successful teaching experience under supervision with deaf or hard of hearing children.

**Adopted by State Board of Education December 11, 1961. Effective January 1, 1963.

**Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio**

ADMINISTRATIVE CRITERIA

**APPROVAL OF TEACHERS IN SPECIAL EDUCATION UNITS
FOR HARD OF HEARING CHILDREN EFFECTIVE 1963-64
State Board of Education Program Standards—SE 3.0**

- A. Teachers currently in service will be approved if they:**
1. Hold certification for teaching hard of hearing children as prescribed in Certification Standards adopted December 1961.
 2. Hold a standard elementary, secondary or special teaching certificate validated for teaching the hard of hearing as provided for under certification procedures prior to 1961.
 3. Hold a valid teaching certificate and submit a statement of intention to complete the certification requirements within a five-year period. This shall include all teachers, irrespective of years of service; and teachers so approved shall submit evidence of preparation status annually until the requirements have been completed.
 4. Hold a Life Certificate issued prior to September 5, 1935.
- B. Teachers new to the program will be approved if they:**
1. Hold certification for teaching hard of hearing children as prescribed in Certification Standards adopted December 1961.
 2. Hold a standard elementary, secondary or special certificate validated to teach the hard of hearing as provided for under certification procedures prior to 1961.
 3. Hold a valid teaching certificate and submit evidence of completing prescribed certification to teach the hard of hearing within five years of assignment to the special class for hard of hearing children. Teachers approved under this agreement shall submit evidence of preparation status annually until all certification requirements are met.
- C. Emergency Situations:**
1. A teacher in service prior to September 1963 who meets with an emergency which prevents him or her from com-

pleting the certification requirements may have the time limits extended for one year.

2. In case of a vacancy, a teacher who holds a valid teaching certificate may be approved for the current school year. A teacher so approved shall submit evidence of preparation status annually until the certification pattern is completed.

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio

TEACHER QUALIFICATIONS—SPECIAL EDUCATION UNITS
FOR HARD OF HEARING CHILDREN

Section 3.0 State Board of Education Standards

Name of Teacher

School District

According to our records the above teacher has reported the following qualifications:

- 1. Teacher holds the special certificate to teach hard of hearing children.
- 2. Teacher holds a standard elementary, secondary or special certificate validated for teaching hard of hearing children.
- 3. Teacher holds a Life Certificate issued prior to September 5, 1935.

If number 1, 2, or 3 is checked *it will be necessary that we have a copy of the actual teaching certificate.*

- 4. Teacher is not certificated to teach hard of hearing children as prescribed in Ohio Certification Standards effective December 1961.
 - a. Teacher has filed a letter of intent to complete training as prescribed in Administrative Criteria, effective September 1963.

Date of letter

If number 4 is checked this teacher must complete training by September It will then be necessary for you to submit a copy of the certificate.

Please return one copy of Form SE 3.9B as soon as possible. The above information is accurate or has been corrected accordingly.

.....
Superintendent or Designated Representative

Date

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio

PROCEDURES FOR BOARDING HOME APPROVALS

I. Legal Authority (Section 3323.12 R. C. Payment of Board)

The State Board of Education may arrange with any board of education which maintains a class for the instruction of blind, deaf, or crippled persons, or affords special instruction for such children who are not school residents of the district, to pay for the board of any such persons under such standards and with such restrictions as the State Board of Education prescribes.

II. General Information

A physically handicapped child who lives in a school district that does not maintain an appropriate special class may attend school in another district where such a program is available.

When a child attends special class in a school district other than that of his residence he may be boarded, and the cost of such board may be paid by the State.

Neither the school personnel nor parents should assume responsibility for finding boarding homes, placing children in homes or changing children from one home to another. This responsibility is vested in the Ohio Department of Public Welfare, which enlists the cooperation of local agencies giving services to children.

III. Procedures

1. The sending school district is responsible for making contact with the receiving school district.
2. The receiving school district will notify the sending school district whether the child will be accepted in the program.
3. The school district that advances payment for the boarding home shall:
 - A. Complete form BH 1 in triplicate for all initial applications.
 - B. Complete form BH 2 in duplicate annually.
4. When the above forms are properly completed the superintendent should submit the forms to the Ohio Depart-

ment of Education, Division of Special Education as soon as possible.

5. The Division of Special Education will notify the Ohio Department of Welfare that the child has been accepted in an approved program and that boarding care is authorized.
6. When a boarding home is secured the school district will be notified accordingly.



STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS 15

MARTIN ESSEX
Superintendent of
Public Instruction

To: School Administrators and Health Departments
From: Martin Essex, Superintendent of Public Instruction

Please find attached a copy of the new policies adopted by the State Board of Education relative to admission and dismissal policies and criteria for the Ohio School for the Deaf and the Ohio School for the Blind.

If you have any further questions or desire additional information, please contact:

S. J. Bonham Jr., Director
Division of Special Education
Ohio Department of Education
3201 Alberta Street
Columbus 4, Ohio

OHIO SCHOOL FOR THE DEAF:

A. Admission

1. Procedures

- a) All deaf and all deaf-blind children will be referred to the Division of Special Education.
 - 1) All referrals will be made by the school district of residency of the deaf or deaf-blind child.
 - 2) The Division of Special Education will maintain a central file for all information concerning deaf children.
- b) All deaf children referred will be seen by a staff clinic team for evaluation in the following areas:
 - 1) Otological
 - 2) Audiological
 - 3) Psychological
 - 4) Educational
 - 5) Other special areas may be included when additional information is necessary to complete the evaluation.
- c) The report of each child will be referred to the following committee:
 - 1) Superintendent, Ohio School for the Deaf or his designated representative.
 - 2) Director, Division of Special Education.
 - 3) One member will be designated by the Superintendent of Public Instruction.
- d) The committee recommendations will be submitted to the Superintendent of Public Instruction for appropriate action.

2. Criteria for Admission—Children may be admitted to either a residential or a day school program at the Ohio School for the Deaf:

- a) If they have a severe through profound hearing loss in the speech range. This is a 60 decibel or more loss in the better ear. (ASA - 1951)
- b) If their calendar age is 4 years 6 months by September 1st of the current school year.
- c) If they are capable of profiting substantially by instruction. This will be determined by the standards adopted by the State Board of Education under Section 3321.05 R.C.

d) If they have sufficient physical and social maturity to adjust to the discipline of formal instruction and group living.

3. Placement—Factors that will be considered in placement of children are:

- a) Availability of a suitable local school program
- b) Needs of individual children
- c) Parental preference

B. Transfer and Dismissal

1. Procedures:

- a) All children considered for either dismissal or transfer will be referred to the committee outlined in Section A-1 (c), who after study, for good and sufficient reason may recommend appropriate action.

APPENDIX B
FORMS

Submit in *Triplicate*
before October 11th

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio

Form SE 3.11
Rev. 8/65

APPLICATION FOR APPROVAL OF SPECIAL EDUCATION UNIT FOR HARD OF HEARING

Name of School School District County

	Name of Pupil	Birth Date	Psychological Data			Hearing Loss			County and School District For Tuition Pupils *
			Test	I.Q.	Date	Right	Left	Date Tested	
1.									
2.									
3.
9.									
10.									

91

Approved A.D.M.
Rejected
.....	Director, Div. of Sp. Ed.
Date

Signature Superintendent or Designated Representative
 Title
 Name of Teacher
 * Number of years in present assignment
 * Form 3.9 must be completed for all teachers new to program

Approval of these special education units is contingent upon maintenance of minimum standards established by the State Board of Education.

INSTRUCTIONS

Column 1. List names of pupils in alphabetical order, last name first.

2. Report birth dates in the following order: month-day-year.

3. Information relative to intelligence quotient; report name of test used, numerical I. Q. score, and date test was administered.

4. Hearing loss should be reported in decibels for the frequencies in the speech range (500 to 2000 cps) for each ear. To find the average, total the loss recorded for the three frequencies; divide by three. Compute and report loss for each ear.

If the audiogram reveals a precipitous high frequency curve of hearing loss, average the two better frequencies (500-2000 cps).

If an aided speech reception threshold has been established report this figure in parenthesis.

5. Tuition pupils—report name of county and name of sending school district. Boarding pupils—report them by placing asterisk after the name of sending school district.

6. Complete Form 3.9 for all teachers new to the program and/or those not certificated to teach hard-of-hearing children; include course number and credit earned in semester hours, year completed and number of years of experience teaching the hard of hearing.

Submit in *Triplicate*
before October 11th

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus 4, Ohio

Form SE 2.11
Rev. 8/65

APPLICATION FOR APPROVAL OF SPECIAL EDUCATION UNIT FOR DEAF

Name of Pupil	Birth Date	Psychological Data			Hearing Loss		Date Tested	County and School District for Tuition Pupils *
		Test	I.Q.	Date	Right	Left		
1.								
2.								
.....								
9.								
10.								

Name of School School District County

Approved	A.D.M.
Rejected	
.....	Director, Div. of Sp. Ed.
Date	

Signature Superintendent or Designated Representative
 Title
 Name of Teacher

* Number of years in present assignment
 * Form 2.9 must be completed for all teachers new to program.

Approval of these special education units is contingent upon maintenance of minimum standards established by the State Board of Education.



INSTRUCTIONS

- Column 1. List names of pupils in alphabetical order, last name first.
2. Report birth dates in the following order: month-day-year.
 3. Information relative to intelligence quotient; report name of test used, numerical I. Q. score, and date test was administered.
 4. Hearing loss should be reported in decibels for the frequencies in the speech range (500 to 2000 cps) for each ear. To find the average, total the loss recorded for the three frequencies; divide by three. Compute and report loss for each ear.
If the audiogram reveals a precipitous high frequency curve of hearing loss, average the two better frequencies (500-2000 cps).
If an aided speech reception threshold has been established report this figure in parenthesis.
 5. Tuition pupils—report name of county and name of sending school district. Boarding pupils—report them by placing asterisk after the name of sending school district.
 6. Complete Form 2.9 for all teachers new to the program and/or those not certificated to teach deaf children; include course number and credit earned in semester hours, year completed and number of years of experience teaching the deaf.

Form SE 2.22
Revised 9/65

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

S. J. Bonham, Jr., Director

OTOLOGIST'S REPORT

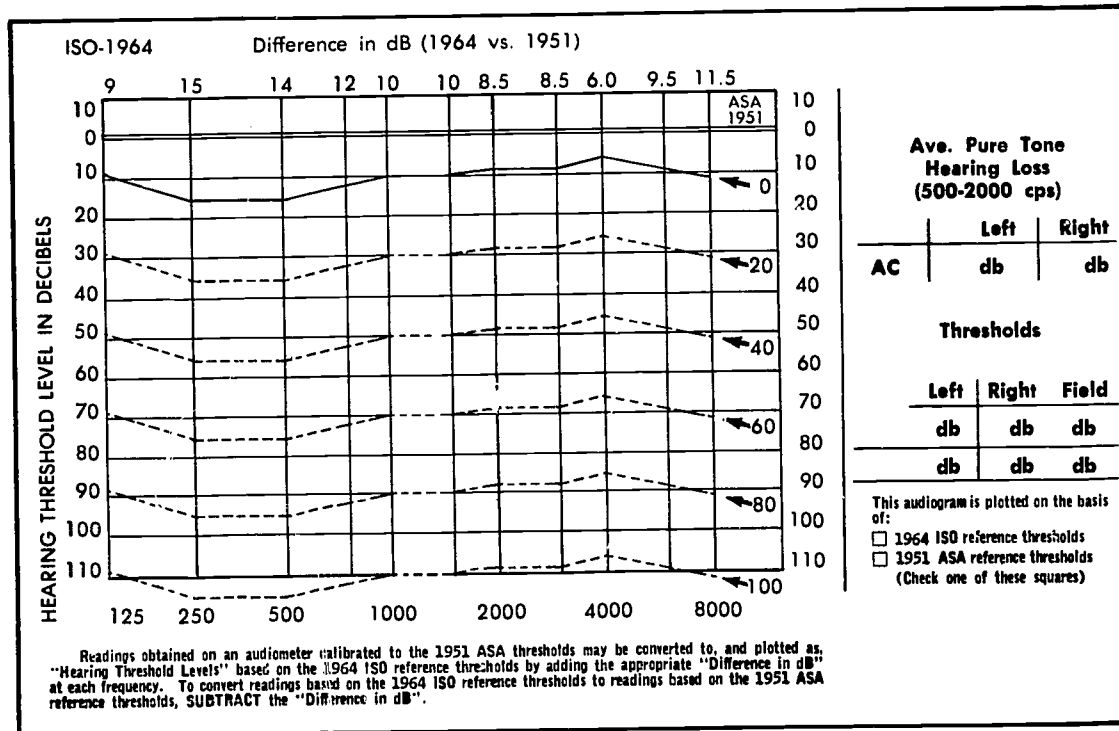
Name of Child School District Birth Date

History (Birth, Developmental, and Medical):

Ear, Nose and Throat Examination

Diagnosis

Medical Recommendation



Examiner

Professional Title

Address (Street) (City) (State)

Date of Examination

Submit in *Duplicate*

Form SE 11.211

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

Application for Individual Tutoring for Hearing Handicapped *

Deaf Hard of Hearing

School District County

Name
Last First Middle

Address
City Zone Route County

Sex Birth Date Grade in School

Name of school district of residence

Did child formerly attend special class? Yes No

If yes, where? How long?

Other comments

Name of teacher to be engaged to provide academic tutoring

..... Type of certification held

Will tutoring be done during school hours? After school hours

The following must accompany this application:

1. A recent audiogram. This must be one completed within the year of date of application.
2. A psychological report to be completed by a qualified psychologist.
3. A summary of child's school progress.

(See Section 11.2 of State Board of Education Standards for Special Education)

<p>Approved: Yes No</p> <p>Not to exceed 5 hours per week at \$3.00 per hour</p> <p>.....</p> <p>S. J. Bonham, Jr., Director Division of Special Education</p> <p>Date</p>
--

Signed

Title

Address

Date

* This application should not be submitted for speech therapy, lip reading, and auditory training.

Submit in Duplicate

SE BH 2

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

APPLICATION FOR BOARD

Home School District County

Name of Child

Date of Birth Grade in School

Name of Parents or Guardian

Address

Location of Special Class: City Building

Type of Handicap: (Check) Deaf Hard of Hearing

Blind Partially Seeing Crippled

Is this a new application? Yes No

All initial applications for boarding home approval must be accompanied by Form SE. BH 1. (Information Needed in Securing Boarding Home)

.....
Superintendent or Designated Representative

Date of Application

Address

Approved:	Per Week
Rejected:	
Date:	
.....	
Director, Division of Special Education	

Submit in
Triplicate

SE BH 1

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

**INFORMATION NEEDED IN SECURING BOARDING HOME
FOR PHYSICALLY HANDICAPPED CHILD**

(For referral to Child Welfare Services
Div. of Social Administration, Ohio Dept. of Public Welfare)

Name of Child Date of Birth

Address City

Religion Race Age Grade Sex

Is child ward of Crippled Children's Services? of
other agency?

Name of Parents
or Guardian
(Surname) (Father) (Mother)

Address
(Street or R.F.D) (City) (County) (Telephone)

Directions for reaching home:

Home School District of Child
(County)

School district advancing money for board

Will child be assigned to home: 5 Days 7 Days*

Type of Handicap: (check Deaf Hard of Hearing

Blind Partially Seeing Crippled

Degree of Dependence: Needs help with (check) Dressing

Bathing Eating Climbing Stairs

Toileting Braces

Please list on reverse side any other significant information that might be
helpful to the caseworker.

.....
Superintendent or Designated Representative

.....
Address

*Explain in Detail

Approved per week

Date

.....
Director,
Division of Special Education

Submit in Duplicate

Form SE 14.32

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

**APPLICATION FOR TRANSPORTATION OF PHYSICALLY
HANDICAPPED CHILDREN
TO REGULAR PUBLIC SCHOOL PROGRAM**

School District County
Name of Child
Date of Birth Grade
Name of School transported to:
Number of miles from home to school (one way)
Rate per day, week or month (Circle) Amount:
Type of conveyance (Check) Group Individual
.....
Superintendent or designated representative
.....
Date of Application
.....
Address

PHYSICIAN'S REPORT

(To be filled out by attending physician)

Name of Child Date of Medical
Examination
Type of Handicap: (Check) Blind Deaf Hard-of-
Hearing Crippled
Diagnosis of handicapping condition
.....
Is this child's physical handicap serious enough to make special transportation
services to school necessary? (Check) Yes No
Probable period child will need special transportation to school. Indicate
number of months

*Approved
Disapproved:
Date:
.....
Director,
Division of Special Education

Signed
Name of Physician
Address
Date

* Reimbursement is based on Section
14.0 of the State Board of Educa-
tion Program Standards for special
Education

Submit in Duplicate

Form SE 2.2

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

REFERRAL OF DEAF CHILD

To: S. J. Bonham, Jr., Director, Division of Special Education

From:
Name of referring local school district

.....
Mailing address

I. Identifying Data

A. Child's Name
Last First Middle

B. Sex Birthdate Age Yr. Mo.

C. Parents' Names
Father Mother

D. Mailing Address
No. Street City

E. Telephone Date Referred

II. Educational History

A. Schools Attended Dates Grades

.....
.....

B. If child is not in school now give reasons:

.....

C. Standardized group test results:

Mental Ability	Achievement
Test	Test
Date	Date
Results	Results

III. Previous Studies: (check)*

A. Psychologist D. Neurologist

B. Physician F. Juvenile Court

C. Clinic E. Health Department

*Please attach copies of reports of any study checked.

VI. Purpose of Referral:

.....
.....

V. Signature of Superintendent or Designated Representative:

Date Title Signature

Ohio Department of Education
DIVISION OF SPECIAL EDUCATION
3201 Alberta Street, Columbus, Ohio 43204

S. J. Bonham, Jr., Director

OTOLOGIST'S REPORT

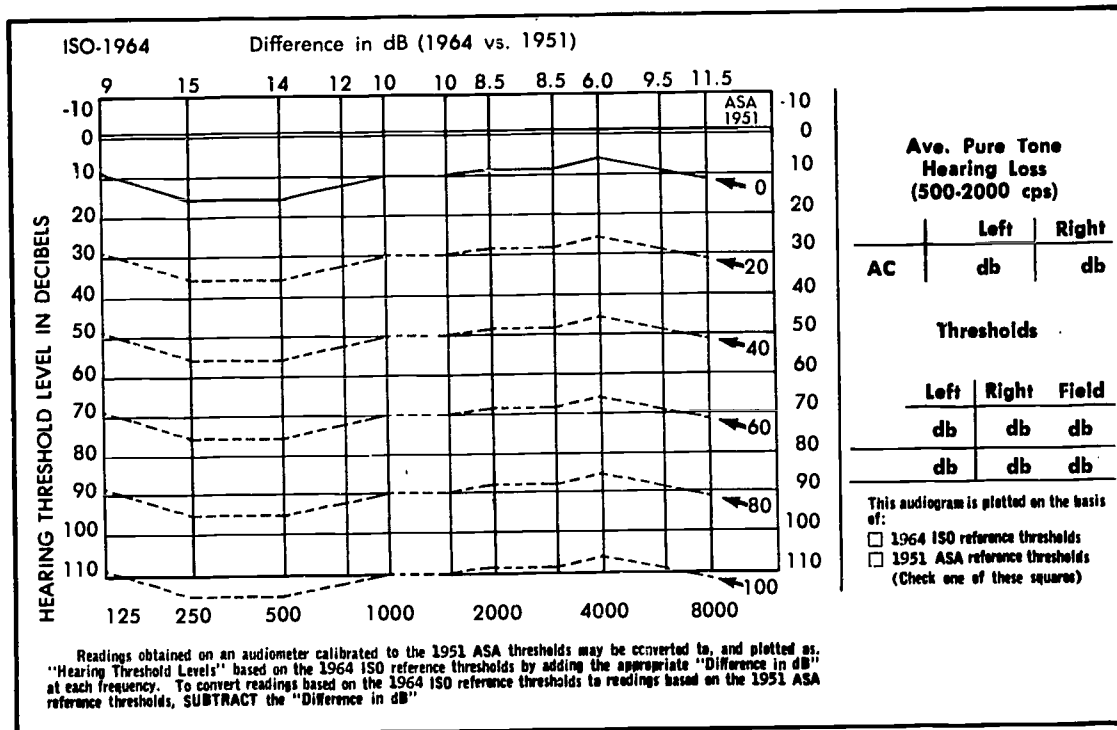
Name of Child School District Birth Date

History (Birth, Developmental, and Medical):

Ear, Nose and Throat Examination

Diagnosis

Medical Recommendation



Examiner

Professional Title

Address (City) (State)

Date of Examination



MARTIN ESSEX
Superintendent of
Public Instruction

STATE OF OHIO
DEPARTMENT OF EDUCATION
3201 ALBERTA ST.
COLUMBUS 4, OHIO

Division of Special
Education

Ohio School
For the Deaf

EVALUATION CLINIC REPORT

Name M F Birthdate Age
School District Grade Parents
Home Address Date Examined
Referred by
Reason for referral

Ohio Department of Education Ohio Department of Health
Medical Clinic Report

Name M F Birthdate Age
School District Grade Parents
Home Address Date Examined
Referred by
Reason for referral

Background Information:

Audiological:

Psychological:

Educational History

Pediatric Examination:

Ophthalmological:

Otological:

Neurological:

Summary and Recommendations:

APPENDIX C
AGENCIES

SECTION V

AGENCIES SERVING DEAF AND HARD OF HEARING

The following agencies provide various types of services to parents, teachers, and interested people of hearing impaired children and youth. The authors have not purported this to be an exhaustive list but rather a representative one.

1. **Alexander Graham Bell Association for the Deaf**
The Volta Bureau, 1537 35th Street, N. W.
Washington 7, D. C.

Alexander Graham Bell founded the Volta Bureau, in Washington, D. C. in 1887. It is an information center on deafness and the education of the deaf. The Bureau answers inquiries from parents of deaf children, particularly parents of young deaf children. It publishes the Volta Review, which is a periodical published monthly except July and August. It publishes the proceedings of the Alexander Graham Bell Association for the Deaf, Inc. The Association meetings are held in the summer every two years in the even years. It publishes and distributes books dealing with deafness, speech, language and related subjects which pertain to the education of the deaf. It cooperates with hearing societies in promoting educational programs for the deaf. It maintains one of the most complete libraries in the country on all subjects related to deafness.

2. **American Hearing Society**
919 18th Street, N. W., Washington 6, D. C.

This is a nonprofit organization, founded in 1919, dedicating its entire efforts and resources to serving children and adults who have communication handicaps. There are one hundred-eighty member organizations throughout the United States affiliated with this federation. Many of the local speech and hearing centers, public and private, and clinics affiliated with colleges and universities are members of this federation. Some of these provide diagnostic, evaluative and therapeutic services in the areas of speech and hearing. The Hearing News and AHS Bulletin Board are publications of this organization.

**3. American Instructors of the Deaf
Gallaudet College, Washington, D. C. 20002**

This organization was founded in 1850 and was incorporated by an act of Congress in 1897. It is an organization of educators of the deaf in the United States and Canada with the general objectives of "promoting the education of the deaf in the broadest, most advanced and practical lines," and for that purpose "to secure the harmonious union in the organization of all persons actually engaged in educating the deaf in America."

**4. Crippled Children's Services
527 South High Street, Columbus, Ohio 43215**

Crippled Children's Services is an agency within the Ohio Department of Welfare. Their primary function is to develop and provide the services of medical specialists to children with severe handicapping conditions whose parents are unable to assume financial responsibility for care.

Children may be referred by their parents, by health or welfare agencies or by physicians to specialists approved by the agency. The specialist then submits a request for required services which can include diagnostic services, medical and/or surgical treatment, specialized therapies and appliances.

In the field of hearing defects, proposals for treatment are made by approved otologists. Hearing loss and hearing aid evaluation must be substantiated by reports of an ASHA approved speech and hearing center.

At all times, emphasis is placed upon rehabilitation or long term supervision to achieve the maximum benefit to the child as he develops into adulthood.

**5. Division of Special Education, Department of Education,
State of Ohio, 3201 Alberta Street, Columbus, Ohio 43204**

This Division has leadership responsibility in activities relating to public school programs for exceptional children. Professional staff members of the Division have a mandate from the Ohio Legislature and State Board of Education to enforce minimum standards in local programs which are partially or fully reimbursed with state monies. All units for deaf and hard of hearing in public school day classes are submitted to the Division for ap-

proval. The Division is charged with the responsibility for providing professional leadership in the area of the education of hearing handicapped children; in-service education programs for teachers; research studies and experimental projects; pre-service teacher education programs; preparation of materials for publication; maintaining professional relations at the local, state and national level; outlining appropriate and desirable criteria for optimal special education programs; extension of present programs in special education; and identification of emerging needs for new programs for hearing handicapped children.

6. Division of Vocational Rehabilitation
240 South Parsons Avenue, Columbus, Ohio 43215

This is a public service agency administering Federal and State laws and funds providing for vocational rehabilitation of the physically and mentally disabled, other than the legally blind.

7. John Tracy Clinic
806 West Adams Boulevard, Los Angeles, California

This is a private agency, which has contributed much to the education of the deaf all over the world. The primary purpose of the agency is to assist parents of deaf children of preschool age to understand the problems resulting from a hearing impairment and to know and appreciate how deafness affects the growth and development of deaf children.

One unique aspect of the clinic is the provision of a correspondence course which is designed to be used by parents with preschool children in the home. The course is presented in installments. Parents utilizing this course in its translated forms have represented forty or more countries. Like other services this may be obtained by parents free of charge.

Another aspect of the clinic program is guidance to parents by working directly with the deaf children enrolled in the clinic. Regular participation in the nursery program is required of the parents of all the children enrolled. Weekly parent classes are available to all parents of deaf children. The discussion topics by the parents include child development, parent attitudes, child

guidance, philosophy of nursery schools and other problems related to deafness and the education of deaf children.

The agency makes no charge to any parent for its services. It operates only through voluntary contributions made by interested individuals and organizations. The staff of the agency includes an audiologist, a psychologist, trained teachers of the deaf and trained nursery school teachers.

**8. Ohio Department of Health
450 East Town Street, Columbus, Ohio 43215**

The Speech, Hearing and Vision Conservation Unit of the Maternal and Child Health is the agency which was established for the purpose of approving methods and techniques to be used in hearing and vision conservation programs in Ohio. This was made possible by legislative action. Since the inauguration of this program, the services have expanded to include adequate programs of health education, case finding, diagnosis and subsequent medical and rehabilitative care, for all individuals to age twenty-one. These programs have been provided on a state-wide basis. In addition, consultative services are available to governmental, civic and community agencies upon request.